*The door with*
***TAPER-TITE TRACK***
***and SEAL-A-MATIC HINGES***

Rō-Way
OVERHEAD
DOORS

# RŌ-WAY DOORS

*WOOD AND STEEL*
*MOTOR OPERATORS*

**COMMERCIAL AND INDUSTRIAL BUILDINGS**

ROWE MANUFACTURING COMPANY, GALESBURG, ILLINOIS, U. S. A.

**THE HOME OF RO-WAY OVERHEAD DOORS:**

Here at One Location all Wood and Steel Parts are fabricated.

## THE FIVE PRINCIPLES OF RO-WAY LEADERSHIP

**MODERN DESIGN:**

Our policy is one of continual improvement. Ro-Way engineers constantly are experimenting — always seeking new designs which may make good Ro-Way Doors still better.

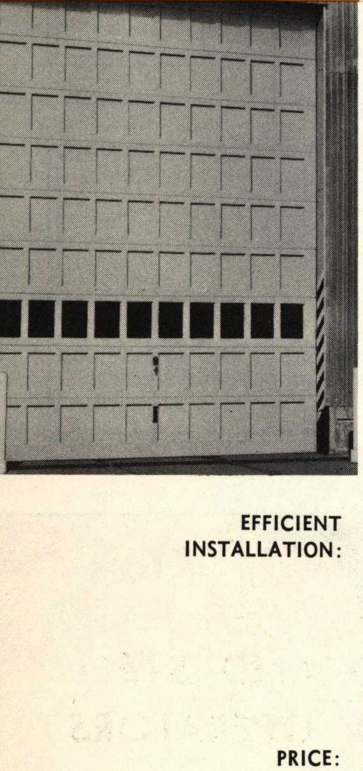
**FINE QUALITY:**

Complete fabrication under one roof insures a uniformly high quality of manufacture. All millwork, as well as hardware is made in the Ro-Way Plant. We do not subcontract. We fabricate completely in our own factory.

**PRECISION MANUFACTURING:**

Fine Ro-Way Doors require fine equipment for their fabrication—and we have it including:

High speed woodworking equipment, including multiple chain mortises, molders, double-end tenoners, 48″ drum sanders.



Metal working equipment, including: stamping machines for fabricating hinges, corner brackets, track rollers, etc. Rolling machines for forming 2″ and 3″ tracking. Spring coilers for winding springs. Automatic screw machines efficiently produce sheaves and roller shafts.

**EFFICIENT INSTALLATION:**

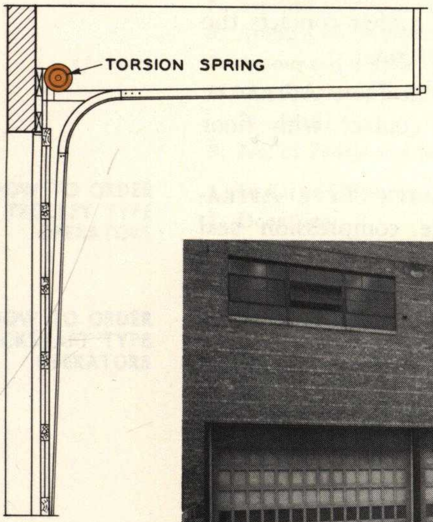
Ro-Way Doors are sold by distributors who use especially trained, skilled mechanics for erection. Efficient installation service insures quality erection at fair costs.

**PRICE:**

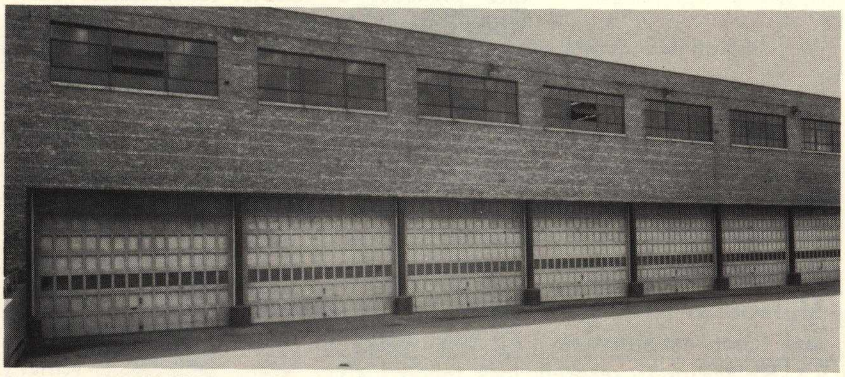
Our policy is to make the best door possible — and then, by engineering and production skills, establish manufacturing costs that permit reasonable selling prices. When quality is considered in relation to cost, Ro-Way Doors are top values.

# Rō-WAY OVERHEAD DOORS

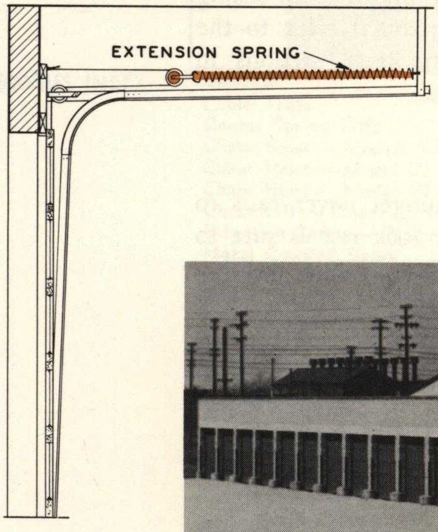
## TORSION SPRING DOORS



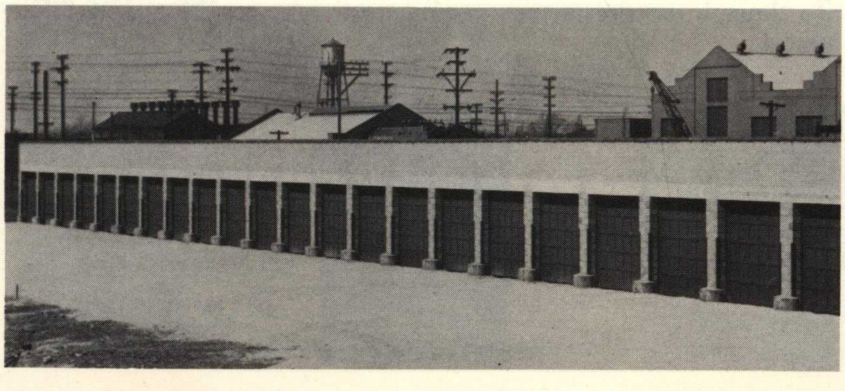
Rowe "Twist Lift" torsion springs develop their power from a twisting or rotating action of the coils as they unwind. The springs in turn transmit power to a live or revolving ball bearing spring shaft. Spring shafts then convey lifting power to die cast grooved cable drums which are pinned to shaft. Each door is weighed to receive the proper customized spring. All galvanized Ro-Way Door hardware and torsion springs are fabricated at the Rowe plant.

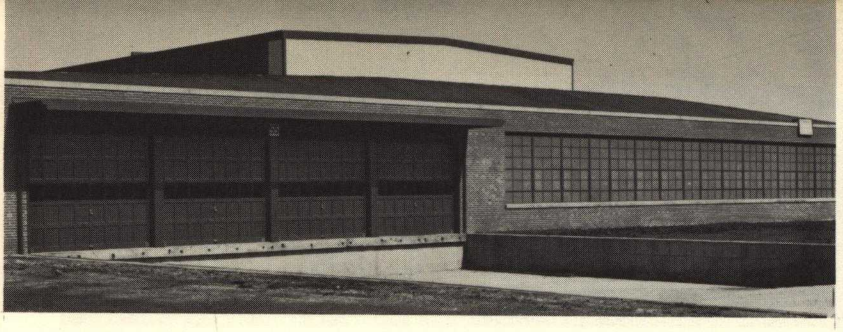


## EXTENSION SPRING DOORS



The "Stretch Lift" extension type springs are power metered to fit every Ro-Way Overhead Door. They can be mounted above or below the horizontal tracks depending upon the amount of available headroom. Springs are fabricated, tempered and tested in our own plant along with Taper-Tite Friction-Reducing Track, hinges, corner brackets, double tread rollers, sheaves, latches and other galvanized parts.





## SEALING ASTRAGALS

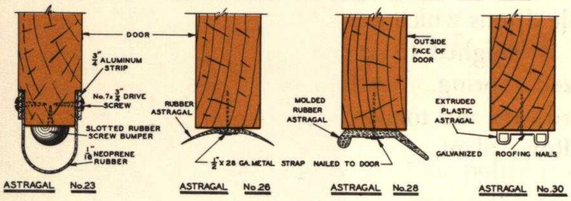
No. 23 Cushion Rubber Astragal compresses to seal door on contact with sill.

No. 26 Double Contact Rubber Astragal. Each edge of rubber contacts the floor when in closed position.

No. 28 Molded Rubber Type Astragal makes tight squeezing contact with floor when door is closed.

No. 30 Extruded Plastic Type Astragal provides a double compression seal when door is closed.

Details of Astragals Used on RōWay Overhead Type Doors

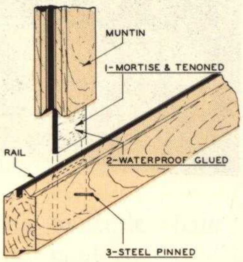


## FEATURES

Astragals seal against water, wind and cold and eliminate minor irregularities in the floor or door sill; also act as a cushion when door closes.

## TRIPLE STRENGTH MILLWORK SECTIONS

Millwork is made triple strong by (1) Mortise and tenon construction (2) Waterproof Gluing (3) Steel Pins to securely lock tenon.



## FRICTION REDUCING TRACK

The patented Slant Rib Track illustrated at "A" (Fig. 628) is an important improvement over common stock track. The extra rib prevents the track roller from rubbing against the inside back wall of the track to cause friction and drag.

The slanted rib "A" provides space to permit the use of extra strong truss-head holts for joining the vertical and horizontal track to the radius curve section. Truss-head bolts hold the track sections in perfect alignment, and eliminate loose track joints.

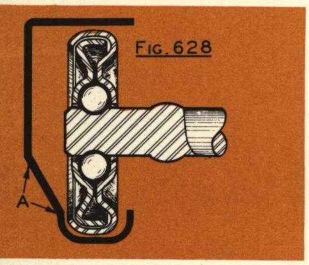
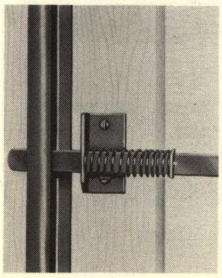
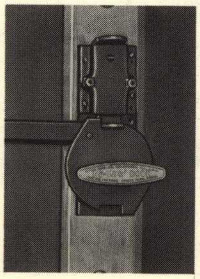


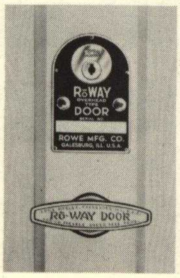
Fig. 628

## POSITIVE ACTING SAFETY LOCK

The No. 660 Ro-Way Latch is made so the plunger never fails to catch in notch of the $4\frac{3}{16}''$ diameter cam. The lock rod is sure to go through the slot in each vertical track as it has $2\frac{3}{8}''$ of locking travel.







# Rō-WAY

## OVERHEAD DOORS

**HOW TO ORDER RO-WAY DOORS**

1. Model Required.
2. Quantity Required.
3. Size of Finished Opening.
4. Kind of Jambs (Wood or Steel).
5. Amount of Headroom.
6. Amount of Sideroom.
7. Amount of Depth.
8. Are Tracks to be Bracket or Angle Mounted?
9. No. of Panels and Sections.
10. Sections open for Glass.
11. Kind of Glass.
12. Who will Furnish Glass?
13. Is Factory Priming Required?
14. Is Chain Hoist Required?
15. Is Astragal Required?
16. Kind of Astragal.
17. Is Pass Door Required?
18. Is High Lift Door Required?
19. Amount of Clearance Required.

**HOW TO ORDER TROLLEY TYPE OPERATORS**

1. Model of Operator.
2. Door Size.
3. Available Electric Current — Voltage, Phase, Cycle.
4. Extra Control Stations — 3-Button; 1-Button; Key Switch; Pull Switch.

**HOW TO ORDER JACKSHAFT TYPE OPERATORS**

1. Model of Operator.
2. Door Size.
3. Is Operator Wall Mounted or Ceiling Operated?
4. Is Operator at Right Side, Left Side, or Center of Door?
5. Available Electric Current — Voltage, Phase, Cycle.
6. Extra Control Stations — 3-Button; 1-Button; Key Switch; Pull Switch.

NOTE: Operators ¾ H.P. or larger are regularly furnished for 3-phase current to comply with electrical codes.

**SELECTOR INDEX:**

| TYPE SPRING | AREA MAX. | HEAD-ROOM | SIDEROOM | | | | MILLWORK | | MODEL No. | PAGE No. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | C1 | C2 | C3 | C4 | Panels Sections Thick | | | |
| Torsion | 224 Sq. Ft. | 6½" | 4⅞" | 6" | | | See | See | 831-DT | 7 |
| " | 224 Sq. Ft. | 15" | 4" | 5" | | | | | 831 | 8 |
| " | 224 Sq. Ft. | 18" | 4" | 5" | | | | | 811 | 8 |
| " | 224 Sq. Ft. | 21¼" | 4" | 5" | | | | | 851 | 9 |
| " | 224 Sq. Ft. | Dr. Ht. + 27" | 4" | 5" | | | Schedule | Section | 891 | 10 |
| " | 400 Sq. Ft. | 22½" | | | 5½" | 6¼" | | | 911 | 11 |
| " | 400 Sq. Ft. | 31½" | | | 5½" | 6¼" | | | 951 | 9 |
| Extension | 80 Sq. Ft. | 10½" | 3⅞" | 4⅞" | | | | | 441 | 13 |
| " | 80 Sq. Ft. | 15" | 3⅞" | 4⅞" | | | on | A-A | 401 | 13 |
| " | 224 Sq. Ft. | 6½" | 4¾" | 5⅞" | | | | | 731-DT | 14 |
| " | 224 Sq. Ft. | 11¼" | 4¾" | 5⅞" | | | | | 731 | 15 |
| " | 224 Sq. Ft. | 15" | 4¾" | 5⅞" | | | | | 701 | 15 |
| " | 224 Sq. Ft. | 26" | 4⅛" | 5" | | | Page | Page | 781 | 16 |
| " | 224 Sq. Ft. | 16" | 4⅛" | 5" | | | | | 791 | 20 |
| " | 400 Sq. Ft. | 22" | | | 5½" | 6¼" | | | 931 | 17 |
| " | 400 Sq. Ft. | 36" | | | 5½" | 6¼" | 21 | 21 | 900 | 17 |

**ACCESSORIES INDEX:**

| | |
|---|---|
| Astragal | 4 |
| Cable Truss | 29 |
| Center Spring Lifts | 34 |
| Chain Hoist — Models 10-A and 15-A With and Without Clutch | 19 |
| Chain Hoist — Model 20 Trolley Type, Also 10-A and 15-A Limited Headroom | 20 |
| Chain Hoist — Model 50 for Torsion Spring Doors | 9 |
| Chain Lift — Model 55 for Torsion Spring Doors | 8 |
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| Metal Covered Doors | 24 |
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| Motor Operator — Control Stations | 32 |
| Motor Operators — Jackshaft Type | 31 |
| Motor Operators — Trolley Type | 30 |
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| Pass Doors | 35 |
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| Service Station Doors — Standard | 25 |
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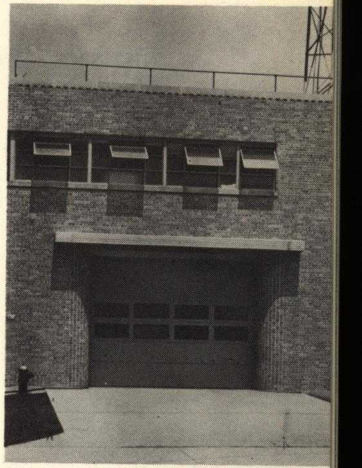
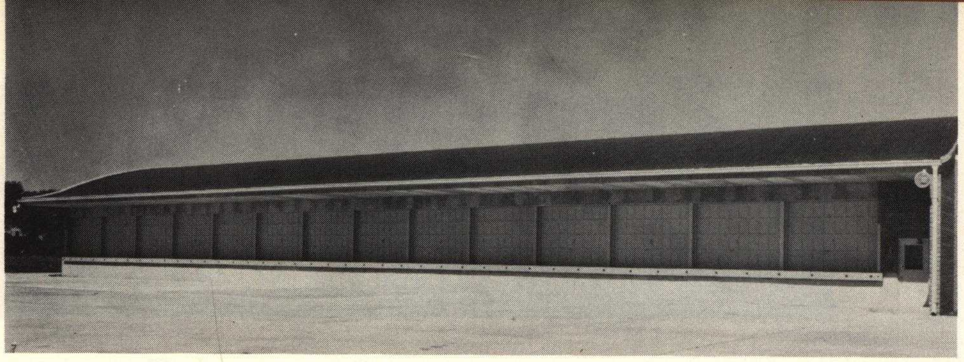
| Steel Doors — Custom | 22 |
| Steel Doors — Narrow Line | 28 |
| Steel Doors — Standard | 23 |
| Torsion Spring — Product and Architectural Specifications | 6 |
| Transoms | 35 |

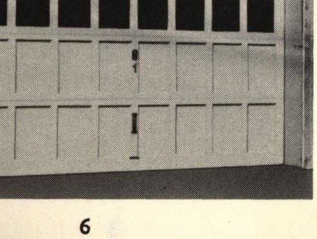


## HEAVY DUTY RO-WAY DOORS FOR COMMERCIAL AND INDUSTRIAL BUILDINGS

*Torsion Spring Type*



| | |
|---|---|
| **MILLWORK:** | 1¾″ thick, stiles and rails Douglas Fir or Sitka Spruce — our option. Joints mortised and tenoned, waterproof glued, steel pinned. Panels ¼″ Masonite Dorlux. |
| **GLASS SECTIONS:** | Any or all sections may be left open for glass or all sections closed if preferred. |
| **SPRINGS:** | One or more torsion springs on full length revolving shaft. |
| **CABLES:** | Lifting cables are 5/32″ 7 × 19 preformed aircraft cables. |
| **TRACKS:** | With the exception of Model 911 and 951, all models have 2″ "Taper Tite" construction on vertical tracks and are mounted on brackets or continuous angles. Curved tracks — 15″ radius — are made as separate units for extra strength and ease of installation. Horizontal tracks have full length reinforcing angle.<br>Models 911 and 951, "Taper Tite" track construction for weather-proof installation. 3″ wide No. 11 gauge, ⅛″ thick. Mounted on continuous angle iron. Horizontal tracks have full length reinforcing angle. Curved tracks — 20″ radius — are made as separate units for extra strength and ease of installation. |
| **TRACK ROLLERS:** | 1 13/16″ diameter for 2″ tracking door.<br>2 13/16″ diameter for 3″ tracking doors. |
| **HINGES:** | Seal-A-Matic graduated type for weatherproof closing arranged for full floating roller shafts. |
| **BOLTS AND SCREWS:** | Cadmium plated. |
| **LOCKING EQUIPMENT:** | Cylinder lock keyed from outside — spring latch inside. Full width Cremone bolt locking bars engage both vertical tracks. Lock on one side only if door has all sections glass. |
| **RUST PROOF HARDWARE:** | All hardware, with the exception of springs and bearings, is galvanized. |
| **ARCHITECTS SPECIFICATIONS:** | Overhead type doors shall be Ro-Way (Model________________) Torsion Spring Type as manufactured by Rowe Manufacturing Company, Galesburg, Illinois. Door Sections shall have 1¾″ Douglas Fir stiles and rails. All joints mortised and tenoned, waterproof glued and steel pinned. Panels ¼″ Masonite Dorlux.<br>Track rollers and sheaves shall be full ball bearing on hardened shafts. "Taper-Tite" track and Seal-A-Matic hinges shall guide the closing door tightly against the jamb — yet free the opening to provide frictionless, easy operation.<br>Locking equipment shall be Cremone bolt type engaging tracks at both sides of door. Controlled by thumb latch on inside of door and cylinder lock on outside.<br>All hardware, including tracking, shall be rustproofed by galvanizing. Bolts and screws cadmium plated. |



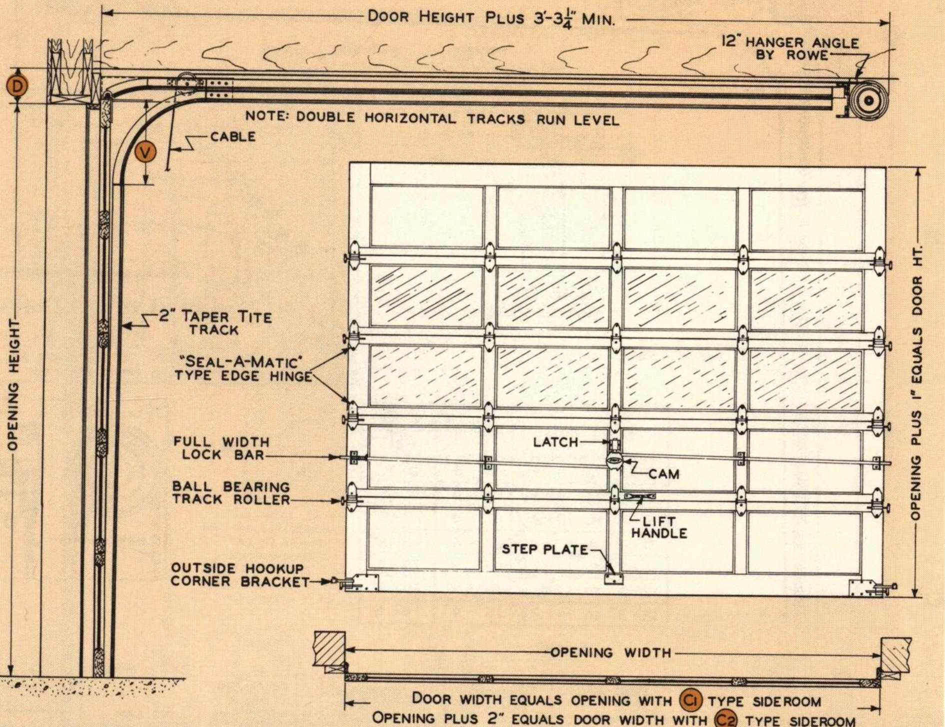
# MODEL 831-DT

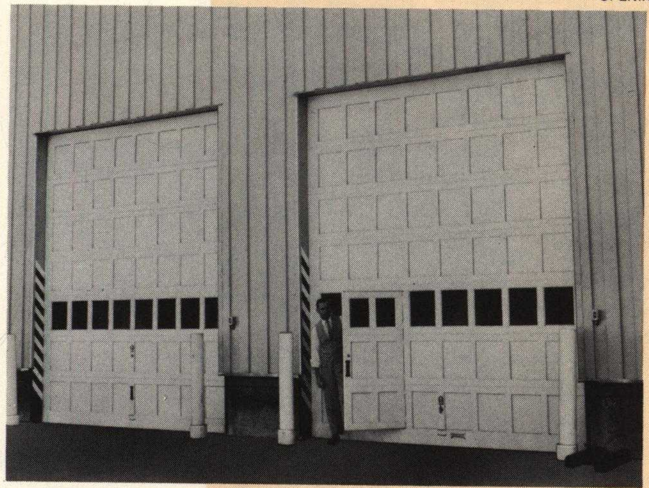
**Rō-WAY** OVERHEAD DOORS

**TYPICAL SECTION THRU DOOR AND OPENING**

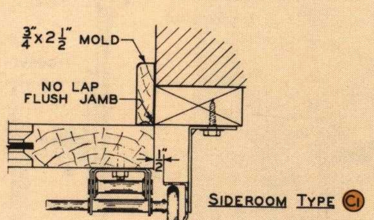
**TYPICAL INTERIOR ELEVATION OF DOOR**

**PLAN VIEW**


DOOR HEIGHT PLUS 3'-3¼" MIN.
12" HANGER ANGLE BY ROWE
D
NOTE: DOUBLE HORIZONTAL TRACKS RUN LEVEL
CABLE
V
OPENING HEIGHT
2" TAPER TITE TRACK
"SEAL-A-MATIC" TYPE EDGE HINGE
FULL WIDTH LOCK BAR
BALL BEARING TRACK ROLLER
OUTSIDE HOOKUP CORNER BRACKET
LATCH
CAM
LIFT HANDLE
STEP PLATE
OPENING PLUS 1" EQUALS DOOR HT.
OPENING WIDTH
DOOR WIDTH EQUALS OPENING WITH C1 TYPE SIDEROOM
OPENING PLUS 2" EQUALS DOOR WIDTH WITH C2 TYPE SIDEROOM

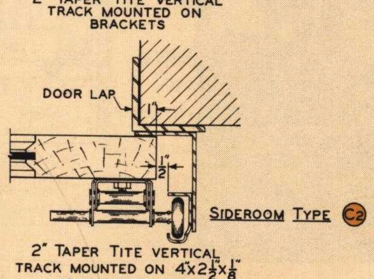


**FLUSH JAMB**



2" TAPER TITE VERTICAL TRACK MOUNTED ON BRACKETS

**LAPPED JAMB**

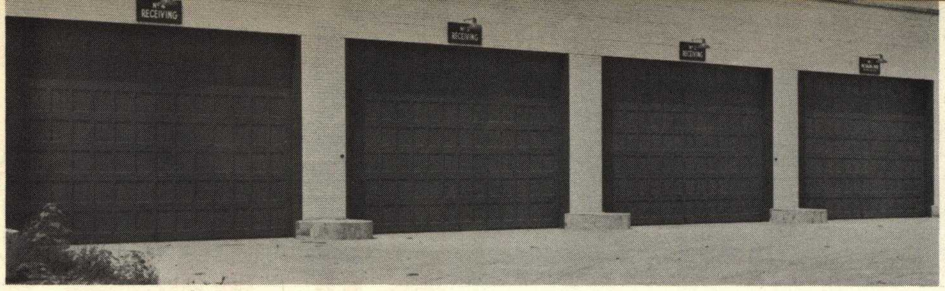


2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2½"x⅛" CONTINUOUS ANGLE

**MODEL SELECTOR**

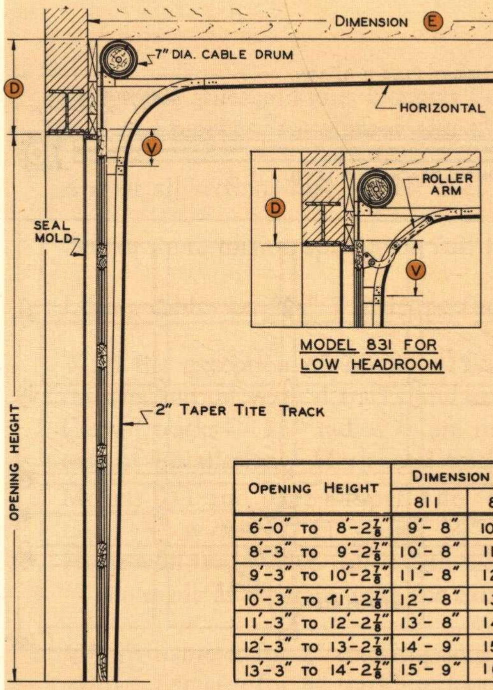
| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM C1 | SIDEROOM C2 | HEAD-ROOM D | TRACK JOINT V |
|---|---|---|---|---|---|---|
| 831-DT | 224 Sq. Ft. | See Page 21 | 4⅞" | 6" | 6½" | 15⁹⁄₁₆" |

# MODELS 831 AND 811



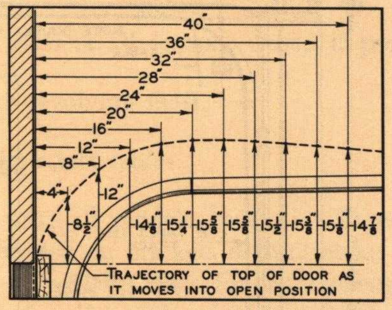
**NO. 55 CHAIN LIFT**

**TYPICAL SECTION THRU DOOR AND OPENING**



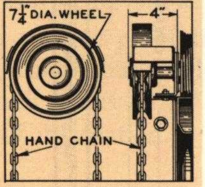
MODEL 831 FOR LOW HEADROOM

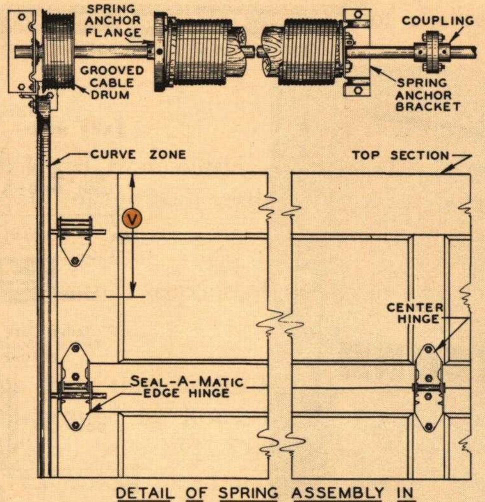
**TRAJECTORY CHART MODEL 811**



| Opening Height | Dimension E | |
|---|---|---|
| | 811 | 831 |
| 6'-0" to 8'-2⅞" | 9'-8" | 10'-8" |
| 8'-3" to 9'-2⅞" | 10'-8" | 11'-8" |
| 9'-3" to 10'-2⅞" | 11'-8" | 12'-8" |
| 10'-3" to 11'-2⅞" | 12'-8" | 13'-8" |
| 11'-3" to 12'-2⅞" | 13'-8" | 14'-8" |
| 12'-3" to 13'-2⅞" | 14'-9" | 15'-8" |
| 13'-3" to 14'-2⅞" | 15'-9" | 16'-8" |

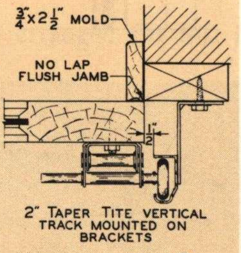
**NO. 55 CHAIN LIFT SHOWN IN RELATION TO CABLE DRUM**





DETAIL OF SPRING ASSEMBLY IN RELATION TO TOP OF DOOR

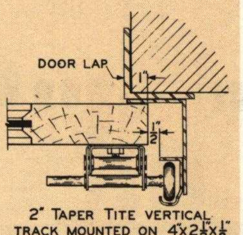
**FLUSH JAMB**



2" TAPER TITE VERTICAL TRACK MOUNTED ON BRACKETS

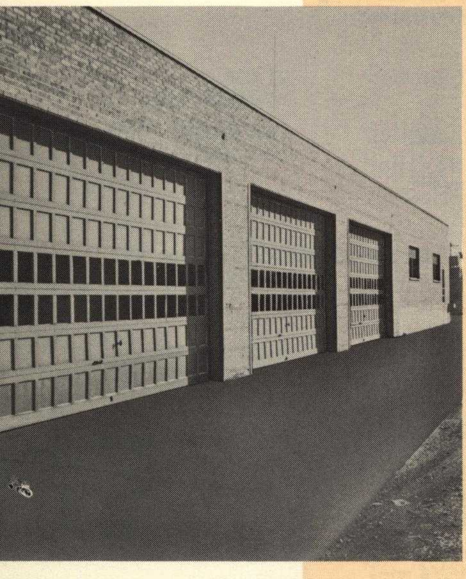
SIDEROOM TYPE C1

**LAPPED JAMB**



2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2½"x⅛" CONTINUOUS ANGLE

SIDEROOM TYPE C2

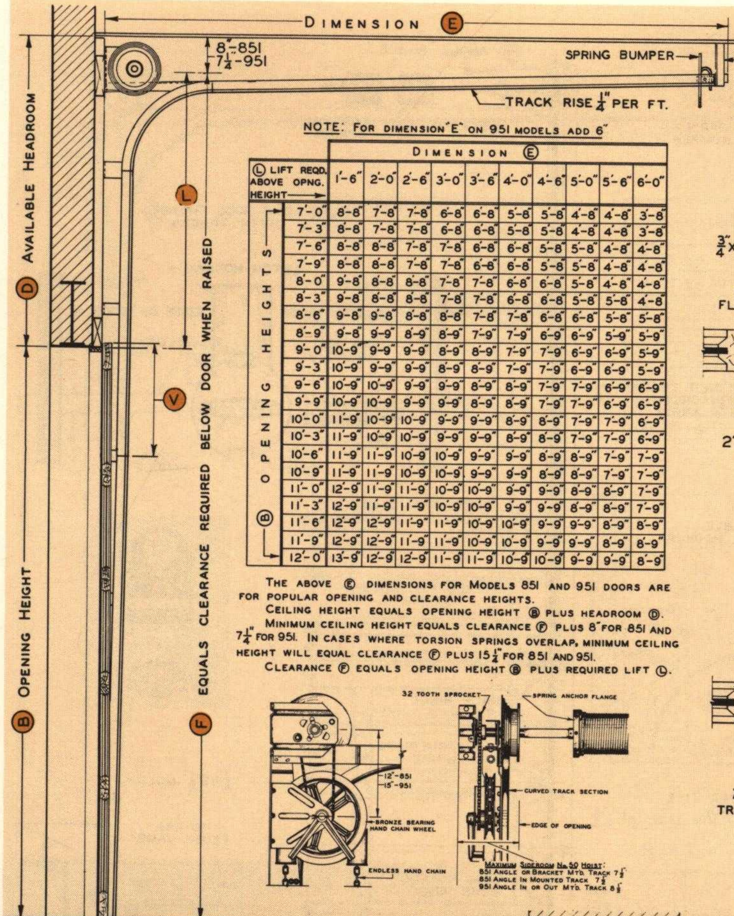


**MODEL SELECTOR**

| Model No. | Area Max. | Millwork Panels Sections Thickness | Sideroom C1 | Sideroom C2 | Head-room D | Track Joint V |
|---|---|---|---|---|---|---|
| 831 | 224 Sq. Ft. | See Page 21 | 4" | 5" | 15" | 10¼" |
| 811 | 224 Sq. Ft. | See Page 21 | 4" | 5" | 18" | 7" |

# MODELS 851, 951 AND NO. 50 CHAIN HOIST

## Rō-WAY OVERHEAD DOORS



NOTE: FOR DIMENSION "E" ON 951 MODELS ADD 6"

| | DIMENSION Ⓔ | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ⓛ LIFT REQD. ABOVE OPNG. HEIGHT → / Ⓑ OPENING HEIGHTS | 1'-6" | 2'-0" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 4'-6" | 5'-0" | 5'-6" | 6'-0" |
| 7'-0" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" | 4'-8" | 4'-8" | 3'-8" |
| 7'-3" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" | 4'-8" | 4'-8" | 3'-8" |
| 7'-6" | 8'-8" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" | 4'-8" | 4'-8" |
| 7'-9" | 8'-8" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" | 4'-8" | 4'-8" |
| 8'-0" | 9'-8" | 8'-8" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 4'-8" | 4'-8" |
| 8'-3" | 9'-8" | 8'-8" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" | 4'-8" |
| 8'-6" | 9'-8" | 9'-8" | 8'-8" | 8'-8" | 7'-8" | 7'-8" | 6'-8" | 6'-8" | 5'-8" | 5'-8" |
| 8'-9" | 9'-8" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" | 6'-9" | 5'-9" | 5'-9" |
| 9'-0" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" | 6'-9" | 5'-9" |
| 9'-3" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" | 6'-9" | 5'-9" |
| 9'-6" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" | 6'-9" |
| 9'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" | 6'-9" |
| 10'-0" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" |
| 10'-3" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" | 6'-9" |
| 10'-6" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" |
| 10'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" | 7'-9" |
| 11'-0" | 12'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" |
| 11'-3" | 12'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" | 7'-9" |
| 11'-6" | 12'-9" | 12'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" |
| 11'-9" | 12'-9" | 12'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" | 8'-9" |
| 12'-0" | 13'-9" | 12'-9" | 12'-9" | 11'-9" | 11'-9" | 10'-9" | 10'-9" | 9'-9" | 9'-9" | 8'-9" |

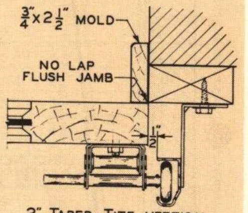
THE ABOVE Ⓔ DIMENSIONS FOR MODELS 851 AND 951 DOORS ARE FOR POPULAR OPENING AND CLEARANCE HEIGHTS.

CEILING HEIGHT EQUALS OPENING HEIGHT Ⓑ PLUS HEADROOM Ⓓ.

MINIMUM CEILING HEIGHT EQUALS CLEARANCE Ⓕ PLUS 8" FOR 851 AND 7¼" FOR 951. IN CASES WHERE TORSION SPRINGS OVERLAP, MINIMUM CEILING HEIGHT WILL EQUAL CLEARANCE Ⓕ PLUS 15¼" FOR 851 AND 951.

CLEARANCE Ⓕ EQUALS OPENING HEIGHT Ⓑ PLUS REQUIRED LIFT Ⓛ.

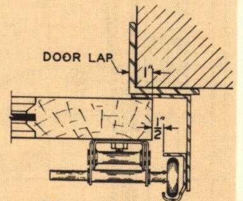
**FLUSH JAMB**



2" TAPER TITE VERTICAL TRACK MOUNTED ON BRACKETS

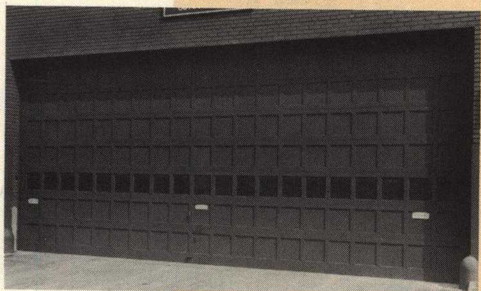
SIDEROOM TYPE C1

**LAPPED JAMB**

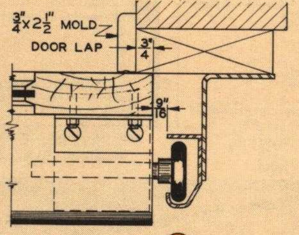


2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2½"x⅛" CONTINUOUS ANGLE

SIDEROOM TYPE C2

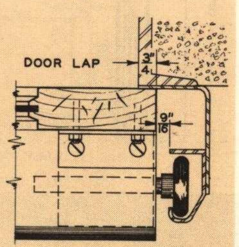


**TRACK MOUNTED ON ANGLE OUT AND ANGLE IN**



SIDEROOM TYPE C3

3" TAPER TITE VERTICAL TRACK MOUNTED ON ⅛"x2½"x4" CONTINOUS ANGLE IRON.



SIDEROOM TYPE C4

3" TAPER TITE, VERTICAL TRACK MOUNTED ON ⅛"x3"x4½" CONTINOUS ANGLE IRON.

**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM C1 | C2 | C3 | C4 | HEAD-ROOM Ⓓ | TRACK JOINT Ⓥ |
|---|---|---|---|---|---|---|---|---|
| 851 | 224 Sq. Ft. | See Page 21 | 4" | 5" | | | 21¼" | 21½" |
| 951 | 400 Sq. Ft. | See Page 21 | | | 6¼" | 6¼" | 31½" | 21½" |

**NO. 50 HOIST SPECIFICATIONS**

**CHAIN HOIST NO. 50 WITHOUT CLUTCH** — For Models 811, 851, 891, 911, 951, and 991

**Uses:** Required on doors over 13' high, over 17' wide or over 179 sq. ft.

**Door Size:** For areas over 179 sq. ft.

**Door Models:** Models 811, 851, 891 with 2" tracking; Models 911, 951 and 991 with 3" tracking.

**Headroom Required:** See model used with.

**Sideroom Required:** Models 811, 851 and 891 — 7½"; Models 911, 951 and 991 — 8½"

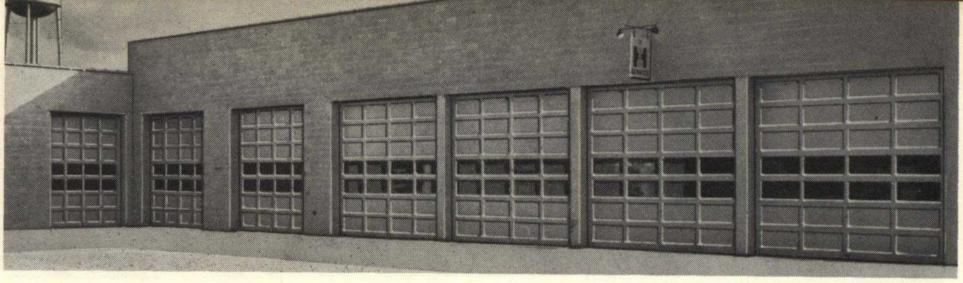
**Gear Ratio:** 7.68 to 1 reduction.

**Drive Chain:** Roller Chain No. 41 — ½" pitch.

**Hand Chain:** No. 2/0 straight link-welded.

**Hand Chain Wheel:** 10¼" pitch diameter — bronze bearing. Located on either side.

# MODEL 891

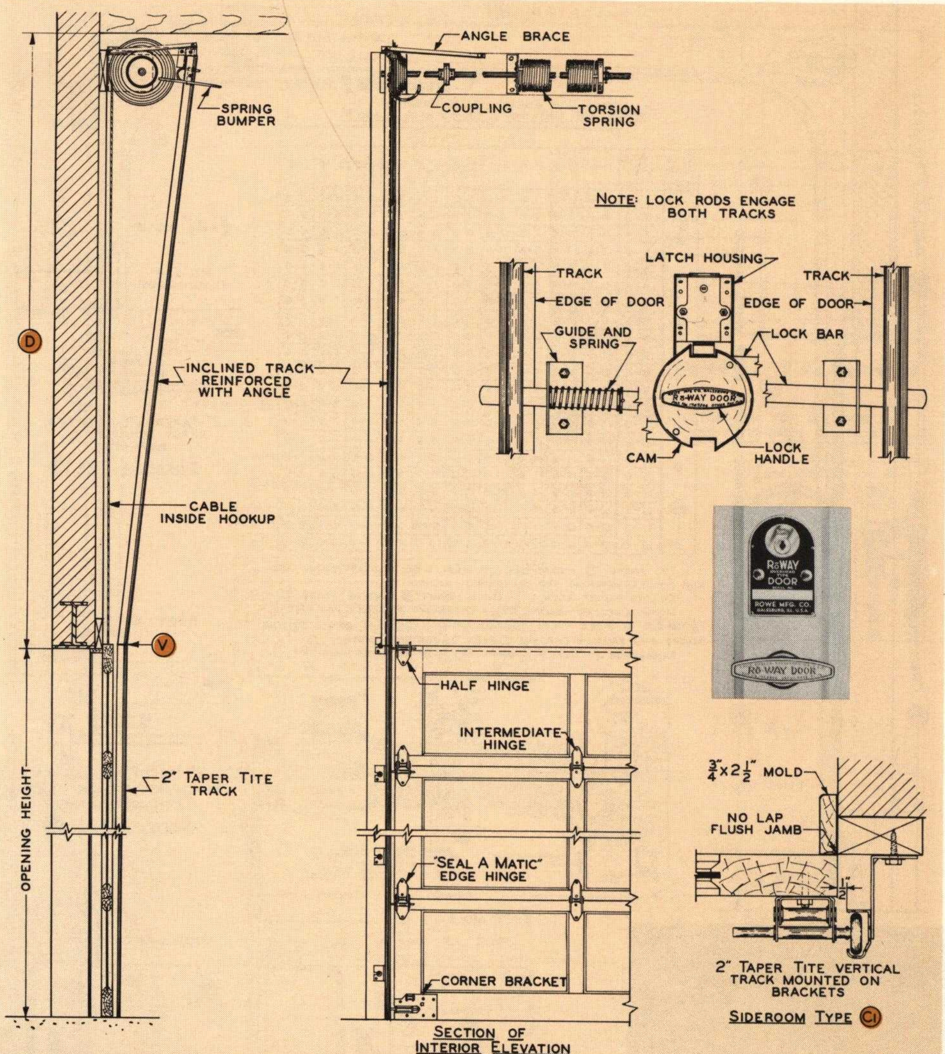


**TYPICAL SECTION THRU DOOR AND OPENING**

**DETAIL OF LOCKING EQUIPMENT**

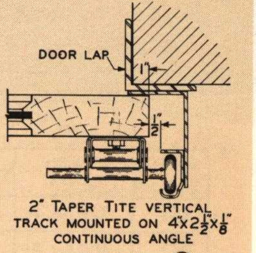
**LOCK ON OUTSIDE OF DOOR**

**FLUSH JAMB**



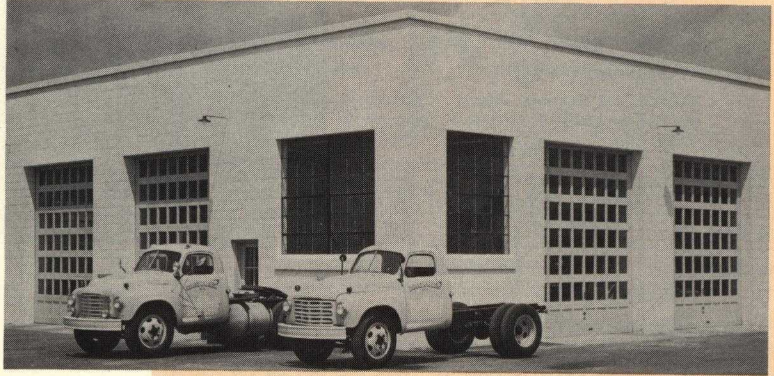
SECTION OF INTERIOR ELEVATION

**LAPPED JAMB**



2" TAPER TITE VERTICAL TRACK MOUNTED ON 4x2 1/2x1/8" CONTINUOUS ANGLE

SIDEROOM TYPE C2



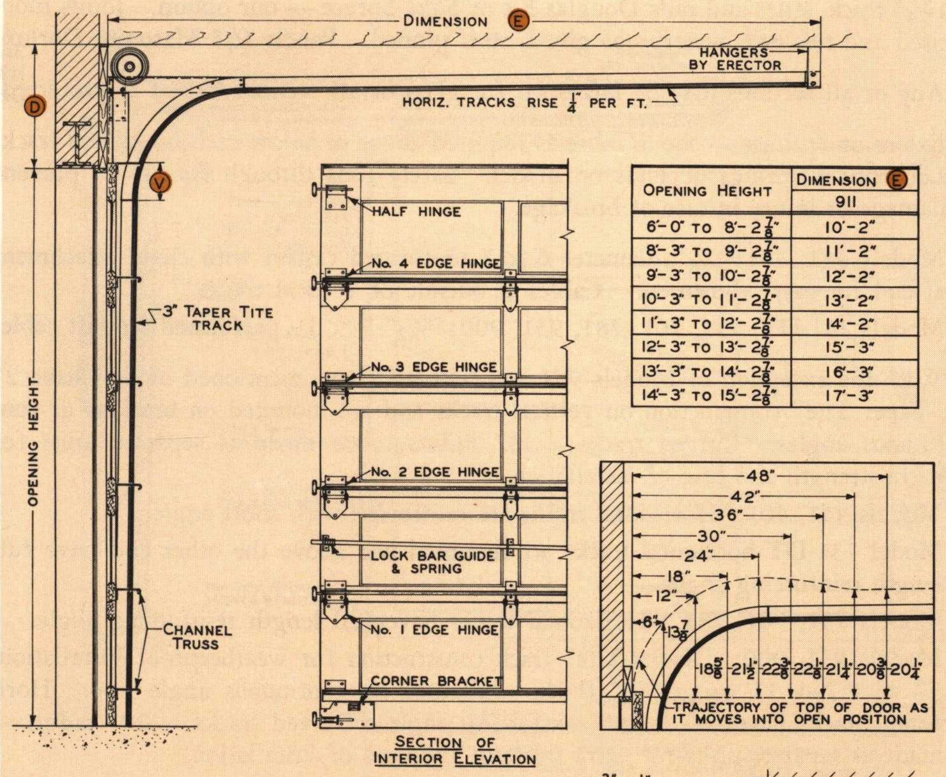
**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM C1 | C2 | HEAD-ROOM D | TRACK JOINT V |
|---|---|---|---|---|---|---|
| 891 | 224 Sq. Ft. | See Page 21 | 4" | 5" | Dr. Ht. + 27" | Dr. = Track |

## MODEL 911

# Rō-WAY OVERHEAD DOORS

**TYPICAL SECTION THRU DOOR AND OPENING**



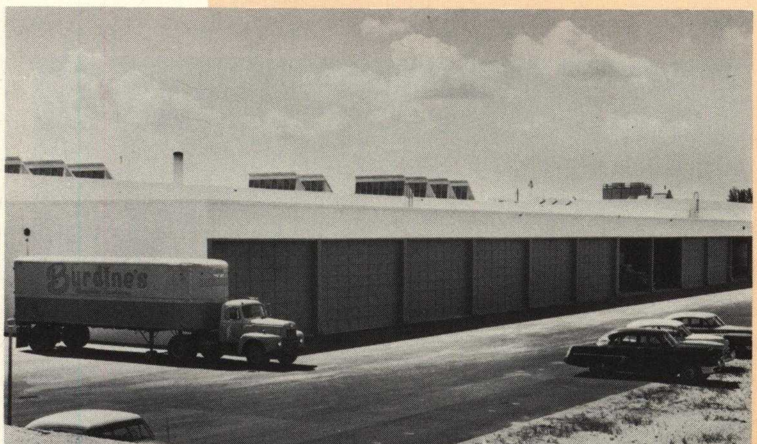
SECTION OF INTERIOR ELEVATION

**DEPTH DOOR REQUIRES**

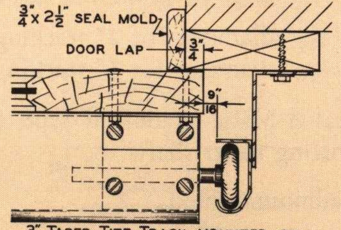
| OPENING HEIGHT | DIMENSION E 911 |
|---|---|
| 6'-0" TO 8'-2 7/8" | 10'-2" |
| 8'-3" TO 9'-2 7/8" | 11'-2" |
| 9'-3" TO 10'-2 7/8" | 12'-2" |
| 10'-3" TO 11'-2 7/8" | 13'-2" |
| 11'-3" TO 12'-2 7/8" | 14'-2" |
| 12'-3" TO 13'-2 7/8" | 15'-3" |
| 13'-3" TO 14'-2 7/8" | 16'-3" |
| 14'-3" TO 15'-2 7/8" | 17'-3" |

**TRAJECTORY CHART**

TRAJECTORY OF TOP OF DOOR AS IT MOVES INTO OPEN POSITION

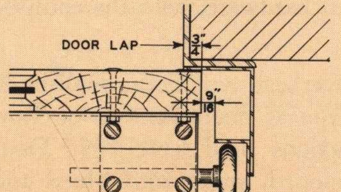


**TRACK MOUNTED ON ANGLE OUT**



3" TAPER TITE TRACK MOUNTED ON 1/8"x2 1/2"x4" CONTINUOUS ANGLE
SIDEROOM TYPE C3

**TRACK MOUNTED ON ANGLE IN**



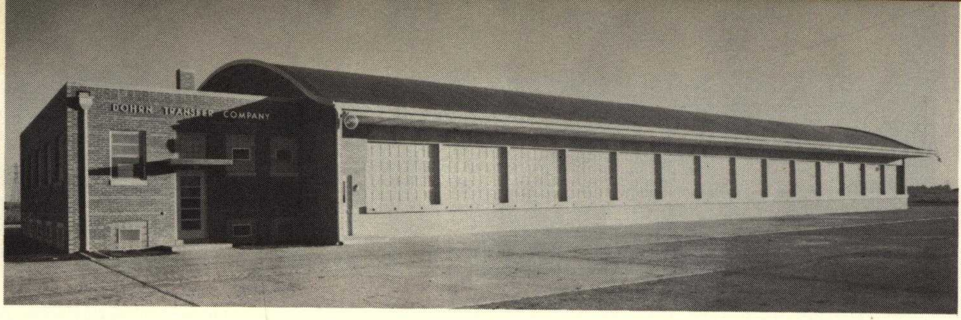
3 TAPER TITE TRACK MOUNTED ON 1/8"x3"x4 1/2" CONTINUOUS ANGLE
SIDEROOM TYPE C4

**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM C3 | SIDEROOM C4 | HEAD-ROOM D | TRACK JOINT V |
|---|---|---|---|---|---|---|
| 911 | 400 Sq. Ft | See Page 21 | 6¼" | 6¼" | 22½" | 7" |

# HEAVY DUTY RO-WAY DOORS FOR COMMERCIAL AND INDUSTRIAL BUILDINGS

*Extension Spring Type*



**MILLWORK:** 1¾″ thick, stiles and rails Douglas Fir or Sitka Spruce — our option. Joints mortised and tenoned, waterproof glued, steel pinned. Panels ¼″ Masonite Dorlux.

**GLASS SECTIONS:** Any or all sections may be left open for glass or all sections closed if preferred.

**SPRINGS:** Extension springs — one or more as required above or below each horizontal track. Location of springs depends on model. Safety rods through springs to prevent damage or injury in case of breakage.

**CABLES:** Models 441, 401: ⅛″ diameter 6 × 7 preformed casteel with chain attachment at end for easy adjustment. Cables at outside of vertical tracks.

Models 731-DT, 731, 701, 781, 931, 900: 5/32″ 7 × 19 preformed aircraft cable.

**TRACKS:** With the exception of Models 931 and 900, all above mentioned models have 2″ "Taper Tite" construction on vertical tracks and are mounted on brackets or continuous angles. Curved tracks — 15″ radius — are made as separate units for extra strength and ease of installation.

Models 441, 401: Horizontal tracks are reinforced with short angle.

Model 731-DT horizontal tracks are mounted one above the other and have full length reinforcing angle.

Models 731, 701, 781. Horizontal tracks have full length reinforcing angle.

Models 931, 900: "Taper-Tite" track construction for weatherproof installation. 3″ wide No. 11 gauge, ⅛″ thick. Mounted on continuous angle iron. Horizontal tracks have full length reinforcing angle. Curved tracks — 20″ radius — made as separate units for extra strength and ease of installation.

**TRACK ROLLERS:** 1 13/16″ diameter for 2″ tracking doors.
2 13/16″ diameter for 3″ tracking doors.

**HINGES:** Seal-A-Matic graduated type for weatherproof closing designed to permit full floating roller shafts.

**BOLTS AND SCREWS:** Cadmium plated.

**LOCKING EQUIPMENT:** Cylinder lock keyed from outside. Spring latch inside. Full width Cremone bolt locking bars engage both vertical tracks.

**RUST PROOF HARDWARE:** All hardware, with the exception of springs and bearings, is galvanized.

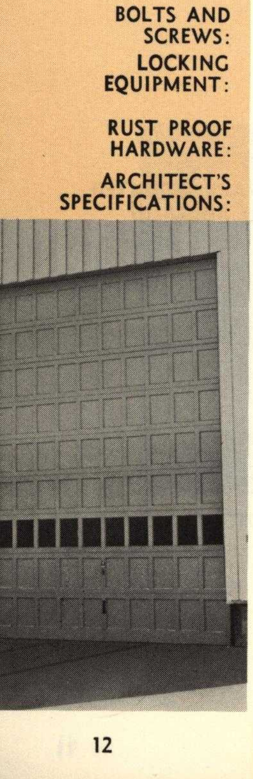
**ARCHITECT'S SPECIFICATIONS:**

Overhead type doors shall be Ro-Way (Model________________) Extension Spring Type as manufactured by Rowe Manufacturing Co., Galesburg, Illinois. Door sections shall have 1¾″ Douglas Fir stiles and rails. All joints mortised and tenoned, waterproof glued and steel pinned. Panels ¼″ Masonite Dorlux.

Track rollers and sheaves shall be full ball bearing on hardened shafts. "Taper-Tite" track and Seal-A-Matic hinges shall guide the closing door tightly against the jamb — yet free the opening to provide frictionless, easy operation.

Locking equipment shall be Cremone bolt type engaging tracks at both sides of door. Controlled by thumb latch on inside of door and cylinder lock on outside.

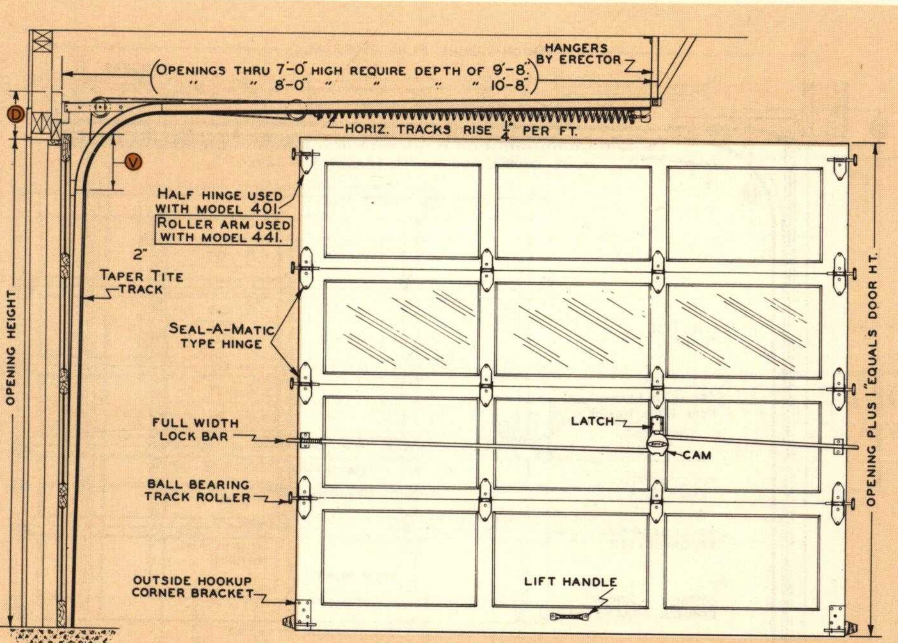
All hardware, including tracking, shall be rustproofed by galvanizing. Bolts and screws cadmium plated.



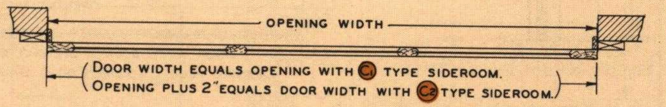
# Rō-WAY OVERHEAD DOORS

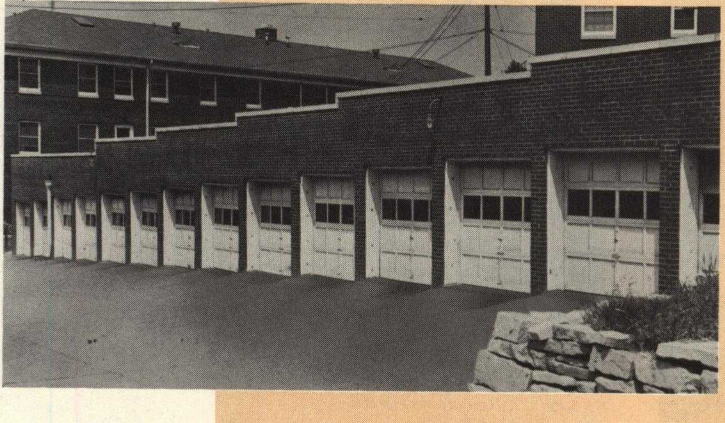
**TYPICAL SECTION THRU DOOR AND OPENING**

**TYPICAL INTERIOR ELEVATION OF DOOR**

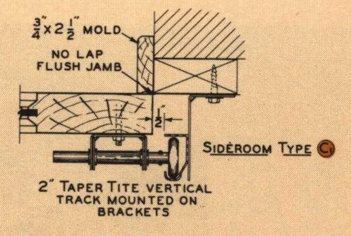

HANGERS BY ERECTOR
(OPENINGS THRU 7'-0" HIGH REQUIRE DEPTH OF 9'-8".
" " 8'-0" " " " " 10'-8".)
HORIZ. TRACKS RISE 1/4" PER FT.
D
V
HALF HINGE USED WITH MODEL 401.
ROLLER ARM USED WITH MODEL 441.
2"
TAPER TITE TRACK
SEAL-A-MATIC TYPE HINGE
OPENING HEIGHT
FULL WIDTH LOCK BAR
LATCH
CAM
BALL BEARING TRACK ROLLER
OUTSIDE HOOKUP CORNER BRACKET
LIFT HANDLE
OPENING PLUS 1" EQUALS DOOR HT.

**PLAN VIEW**

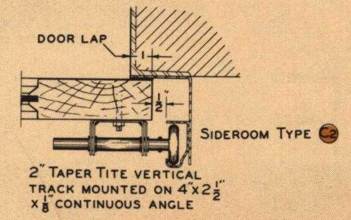

OPENING WIDTH
(DOOR WIDTH EQUALS OPENING WITH C1 TYPE SIDEROOM.
OPENING PLUS 2" EQUALS DOOR WIDTH WITH C2 TYPE SIDEROOM.)



**FLUSH JAMB**



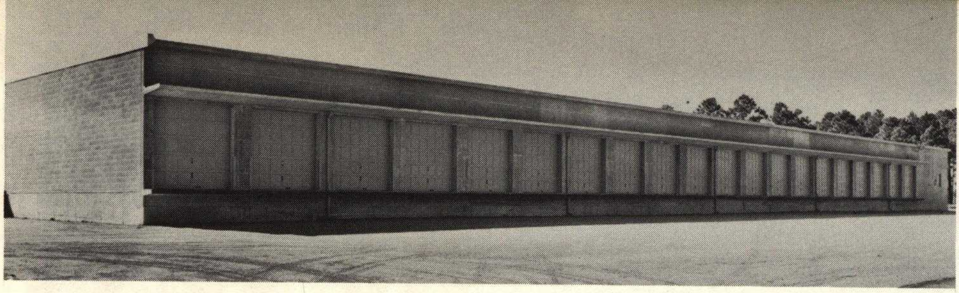
**LAPPED JAMB**


DOOR LAP
1"
1/2"
SIDEROOM TYPE C2
2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2 1/2" x1/8" CONTINUOUS ANGLE

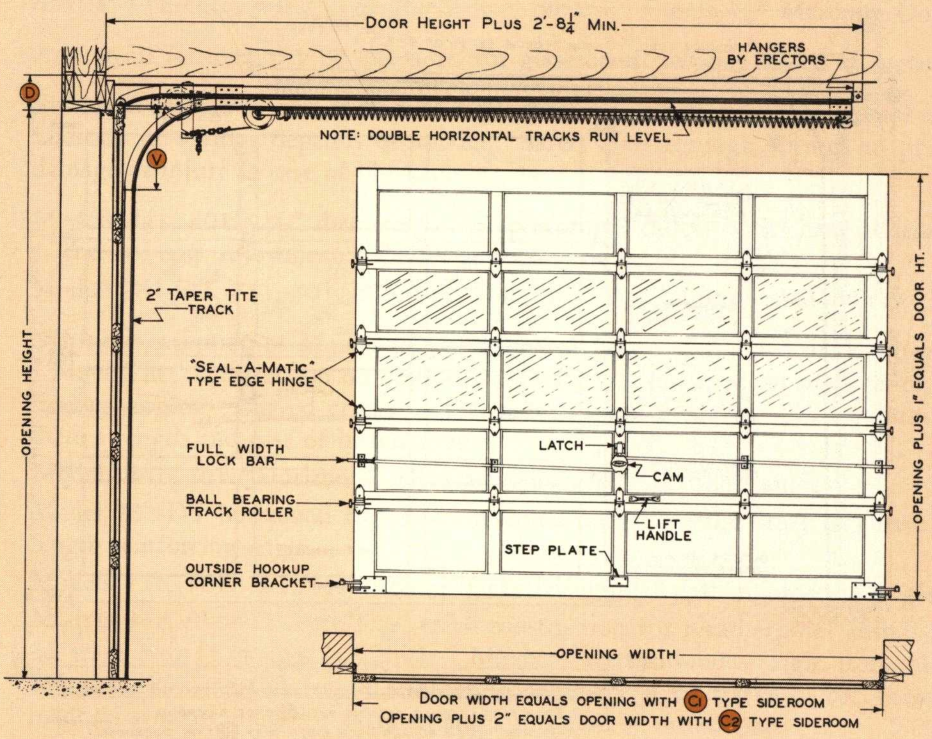
**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK |  |  | SIDEROOM |  | HEAD-ROOM (D) | TRACK JOINT (V) |
|---|---|---|---|---|---|---|---|---|
|  |  | PANELS | SECTIONS | THICKNESS | (C1) | (C2) |  |  |
| 441 | 80 Sq. Ft. | 3 | 4 | 1¾" | 3⅞" | 4⅞" | 10½" | 10¼" |
| 401 | 80 Sq. Ft. | 3 | 4 | 1¾" | 3⅞" | 4⅞" | 15" | 9" |

# MODEL 731-DT



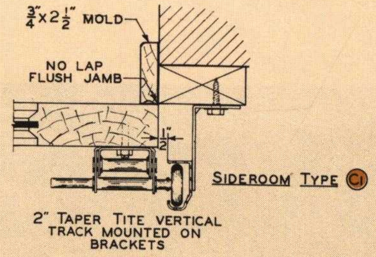
**TYPICAL SECTION THRU DOOR AND OPENING**


Door Height Plus 2'-8¼" Min.
Hangers by Erectors
D
V
Note: Double horizontal tracks run level
2" Taper Tite Track
Opening Height
"Seal-A-Matic" type edge hinge
Full width lock bar
Ball bearing track roller
Outside hookup corner bracket
Latch
Cam
Lift handle
Step plate
Opening plus 1" equals door ht.
Opening width
Door width equals opening with C1 type sideroom
Opening plus 2" equals door width with C2 type sideroom

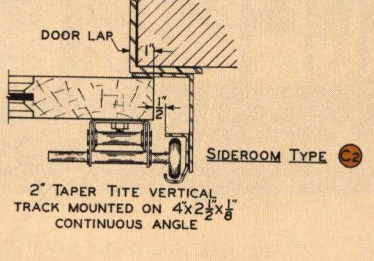
**TYPICAL INTERIOR ELEVATION OF DOOR**

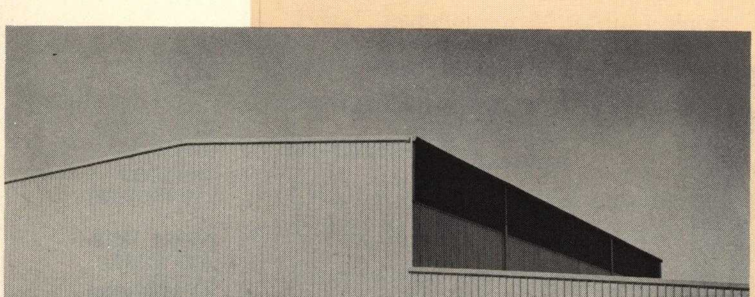
**PLAN VIEW**

**FLUSH JAMB**



**LAPPED JAMB**


Door lap
1"
½"
Sideroom Type C2
2" Taper Tite vertical track mounted on 4"x2½"x⅛" continuous angle



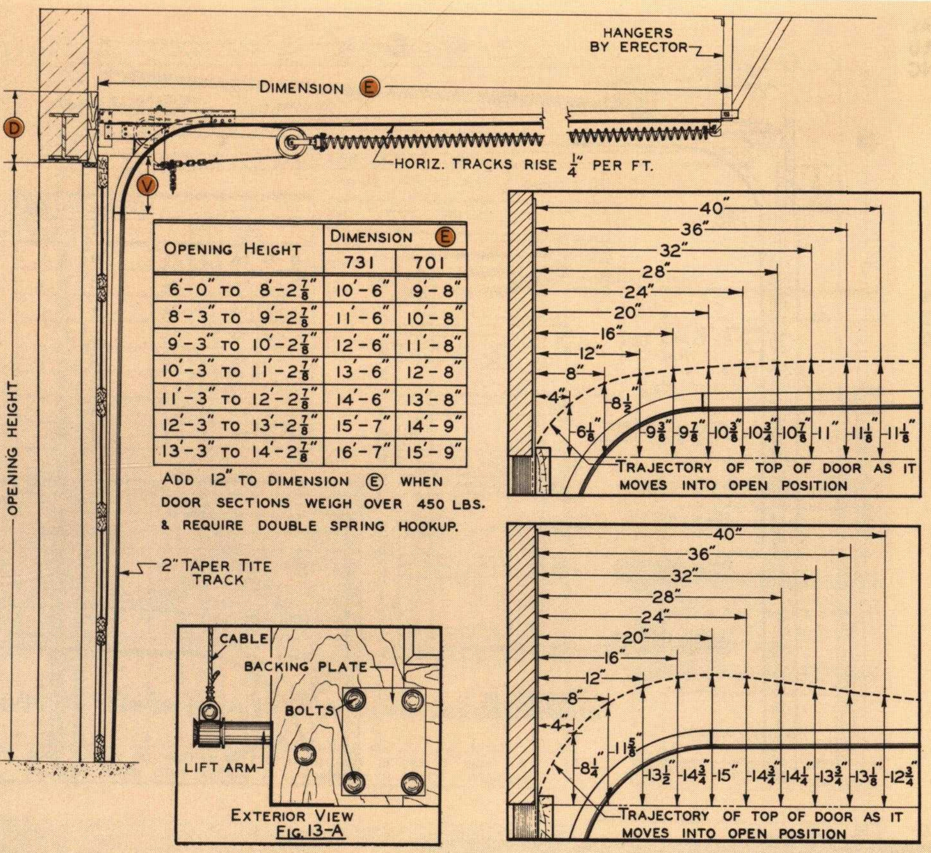
**MODEL SELECTOR**

| Model No. | Area Max. | Millwork | | | Sideroom | | Head-room (D) | Track Joint (V) |
|---|---|---|---|---|---|---|---|---|
| | | Panels | Sections | Thickness | (C1) | (C2) | | |
| 731-DT | 224 Sq. Ft. | See Page 21 | | | 4¾" | 5⅞" | 6½" | 15 9/16" |

## MODEL 731 AND 701

# Rō-WAY OVERHEAD DOORS

**TYPICAL SECTION THRU DOOR AND OPENING**



| OPENING HEIGHT | DIMENSION Ⓔ | |
|---|---|---|
| | 731 | 701 |
| 6'-0" TO 8'-2⅞" | 10'-6" | 9'-8" |
| 8'-3" TO 9'-2⅞" | 11'-6" | 10'-8" |
| 9'-3" TO 10'-2⅞" | 12'-6" | 11'-8" |
| 10'-3" TO 11'-2⅞" | 13'-6" | 12'-8" |
| 11'-3" TO 12'-2⅞" | 14'-6" | 13'-8" |
| 12'-3" TO 13'-2⅞" | 15'-7" | 14'-9" |
| 13'-3" TO 14'-2⅞" | 16'-7" | 15'-9" |

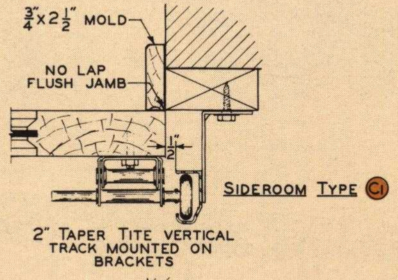
ADD 12" TO DIMENSION Ⓔ WHEN DOOR SECTIONS WEIGH OVER 450 LBS. & REQUIRE DOUBLE SPRING HOOKUP.

EXTERIOR VIEW
FIG. 13-A

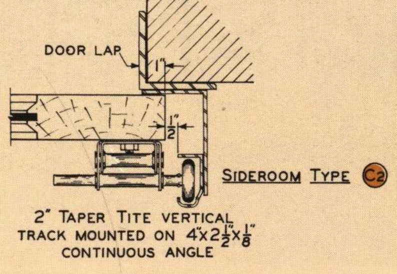
**TRAJECTORY CHART MODEL 731**

**TRAJECTORY CHART MODEL 701**

**FLUSH JAMB**



**LAPPED JAMB**

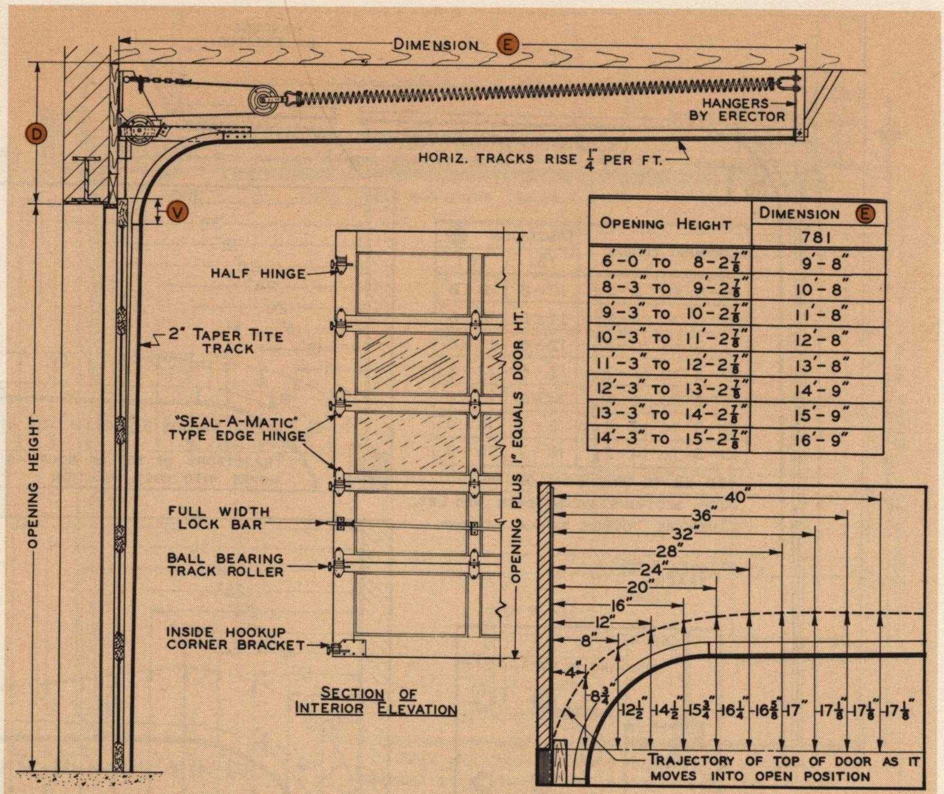

DOOR LAP
1"
½"
SIDEROOM TYPE C2
2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2½"x⅛" CONTINUOUS ANGLE

**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM Ⓒ1 | Ⓒ2 | HEAD-ROOM Ⓓ | TRACK JOINT Ⓥ |
|---|---|---|---|---|---|---|
| 731 | 224 Sq. Ft. | See Page 21 | 4¾" | 5⅞" | 11¼" | 10¾" |
| 701 | 224 Sq. Ft. | See Page 21 | 4¾" | 5⅞" | 15" | 9½" |

# MODEL 781

## TYPICAL SECTION THRU DOOR AND OPENING

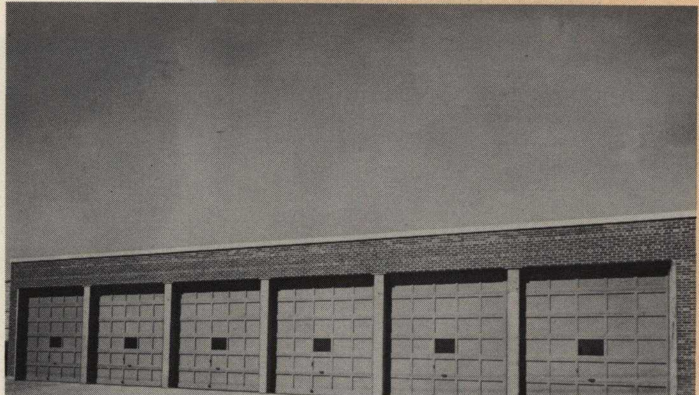

DIMENSION E
HANGERS BY ERECTOR
HORIZ. TRACKS RISE 1/4" PER FT.
D
V
HALF HINGE
2" TAPER TITE TRACK
"SEAL-A-MATIC" TYPE EDGE HINGE
FULL WIDTH LOCK BAR
BALL BEARING TRACK ROLLER
INSIDE HOOKUP CORNER BRACKET
OPENING HEIGHT
OPENING PLUS 1" EQUALS DOOR HT.
40"
36"
32"
28"
24"
20"
16"
12"
8"
4"
8 3/4"
12 1/2"
14 1/2"
15 3/4"
16 1/4"
16 5/8"
17"
17 1/8"
17 1/8"
17 1/8"
TRAJECTORY OF TOP OF DOOR AS IT MOVES INTO OPEN POSITION

SECTION OF INTERIOR ELEVATION

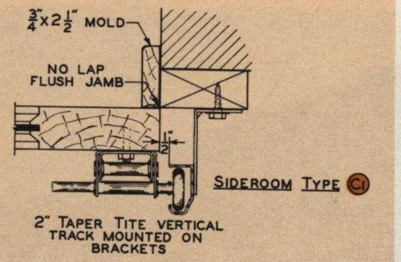
**DEPTH DOOR REQUIRES**

| OPENING HEIGHT | DIMENSION Ⓔ |
|---|---|
| | 781 |
| 6'-0" TO 8'-2 7/8" | 9'-8" |
| 8'-3" TO 9'-2 7/8" | 10'-8" |
| 9'-3" TO 10'-2 7/8" | 11'-8" |
| 10'-3" TO 11'-2 7/8" | 12'-8" |
| 11'-3" TO 12'-2 7/8" | 13'-8" |
| 12'-3" TO 13'-2 7/8" | 14'-9" |
| 13'-3" TO 14'-2 7/8" | 15'-9" |
| 14'-3" TO 15'-2 7/8" | 16'-9" |

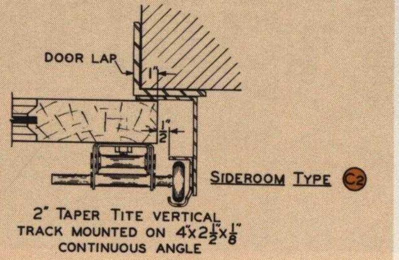
**TRAJECTORY CHART**



**FLUSH JAMB**



**LAPPED JAMB**


DOOR LAP
1"
1/2"
SIDEROOM TYPE C2
2" TAPER TITE VERTICAL TRACK MOUNTED ON 4"x2 1/2"x1/8" CONTINUOUS ANGLE

**MODEL SELECTOR**

| MODEL No. | AREA MAX. | MILLWORK PANELS SECTIONS THICKNESS | SIDEROOM Ⓒ1 | SIDEROOM Ⓒ2 | HEAD-ROOM Ⓓ | TRACK JOINT Ⓥ |
|---|---|---|---|---|---|---|
| 781 | 224 Sq. Ft. | See Page 21 | 4 1/8" | 5" | 26" | 4 3/4" |

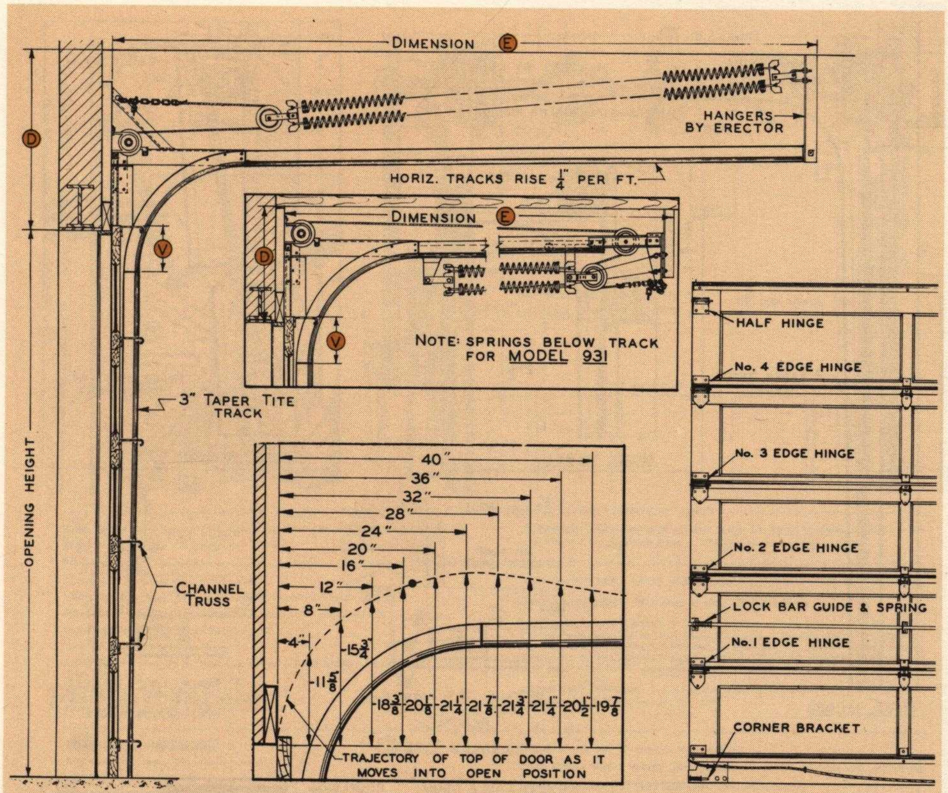
## MODEL 931 AND 900

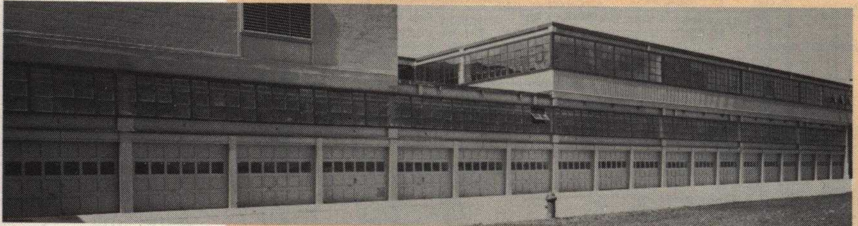
# Rō-WAY

## OVERHEAD DOORS

**TYPICAL SECTION THRU DOOR AND OPENING**

**PARTIAL INTERIOR ELEVATION OF DOOR**

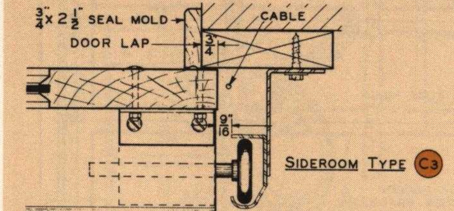




**DEPTH DOOR REQUIRES**

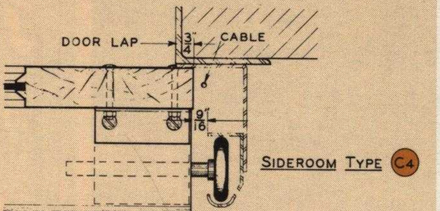
| Opening Height | Dimension Ⓔ | |
|---|---|---|
| | 931 | 900 |
| 6'-0" to 8'-2⅞" | 12'-4" | 10'-2" |
| 8'-3" to 9'-2⅞" | 13'-4" | 11'-2" |
| 9'-3" to 10'-2⅞" | 14'-4" | 12'-2" |
| 10'-3" to 11'-2⅞" | 15'-4" | 13'-2" |
| 11'-3" to 12'-2⅞" | 16'-4" | 14'-2" |
| 12'-3" to 13'-2⅞" | 17'-5" | 15'-3" |
| 13'-3" to 14'-2⅞" | 18'-5" | 16'-3" |
| 14'-3" to 15'-2⅞" | 19'-5" | 17'-3" |

**TRACK MOUNTED ON ANGLE OUT**



3" TAPER TITE TRACK MOUNTED ON ⅛"x2½"x4" CONTINUOUS ANGLE.

**TRACK MOUNTED ON ANGLE IN**



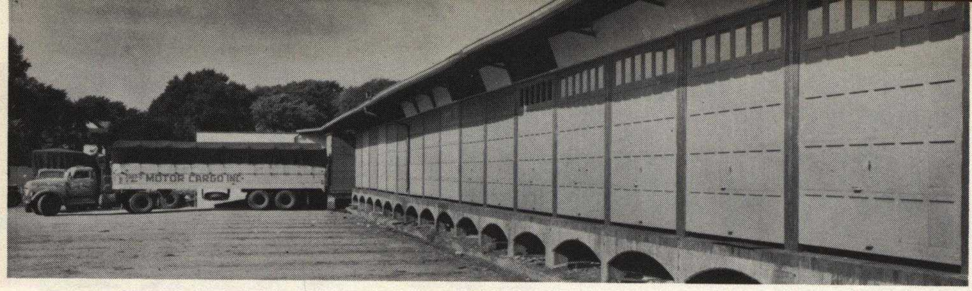
3" TAPER TITE TRACK MOUNTED ON ⅛"x3"x4½" CONTINUOUS ANGLE.

**MODEL SELECTOR**

| Model No. | Area Max. | Millwork Panels Sections Thickness | Sideroom C3 | Sideroom C4 | Headroom Ⓓ | Track Joint Ⓥ |
|---|---|---|---|---|---|---|
| 931 | 400 | See Page 21 | 6¼" | 6¼" | 22" | 8½" |
| 900 | 400 | See Page 21 | 6¼" | 6¼" | 36" | 8½" |

## STANDARD CONSTRUCTION RO-WAY DOORS FOR COMMERCIAL AND INDUSTRIAL BUILDINGS

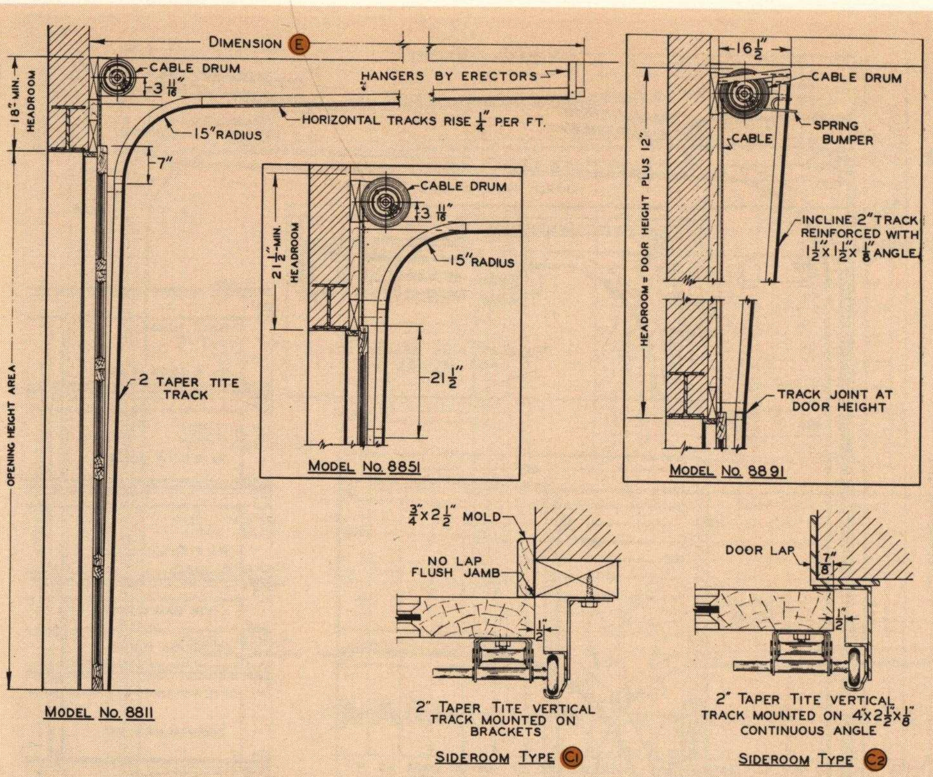
## MODELS 8811, 8851 AND 8891



### TYPICAL SECTION THRU DOOR AND OPENING

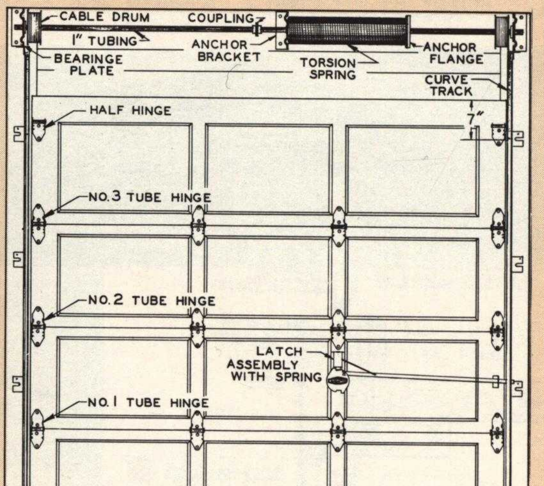
### PARTIAL SECTIONAL VIEW MODEL 8891

### FLUSH AND LAPPED JAMB DETAILS


DIMENSION E
CABLE DRUM
$3\frac{11}{16}''$
HANGERS BY ERECTORS
HORIZONTAL TRACKS RISE $\frac{1}{4}''$ PER FT.
15" RADIUS
$18\frac{3}{4}''$ MIN. HEADROOM
7"
OPENING HEIGHT AREA
2 TAPER TITE TRACK
MODEL NO. 8811
CABLE DRUM
$3\frac{11}{16}''$
$21\frac{1}{2}''$ MIN. HEADROOM
15" RADIUS
$21\frac{1}{2}''$
MODEL NO. 8851
$16\frac{1}{2}''$
CABLE DRUM
CABLE
SPRING BUMPER
HEADROOM = DOOR HEIGHT PLUS 12"
INCLINE 2" TRACK REINFORCED WITH $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{1}{8}''$ ANGLE
TRACK JOINT AT DOOR HEIGHT
MODEL NO. 8891
$\frac{3}{4}'' \times 2\frac{1}{2}''$ MOLD
NO LAP FLUSH JAMB
$1\frac{1}{2}''$
2" TAPER TITE VERTICAL TRACK MOUNTED ON BRACKETS
SIDEROOM TYPE C1
DOOR LAP
$\frac{7}{8}''$
$\frac{1}{2}''$
2" TAPER TITE VERTICAL TRACK MOUNTED ON $4'' \times 2\frac{1}{2}'' \times \frac{1}{8}''$ CONTINUOUS ANGLE
SIDEROOM TYPE C2

NOTE:
DIMENSION E THE SAME ON 8811 AS ON 811 PAGE 8.
DIMENSION E THE SAME ON 8851 AS ON 851 PAGE 9.

### TYPICAL INTERIOR ELEVATION OF DOOR



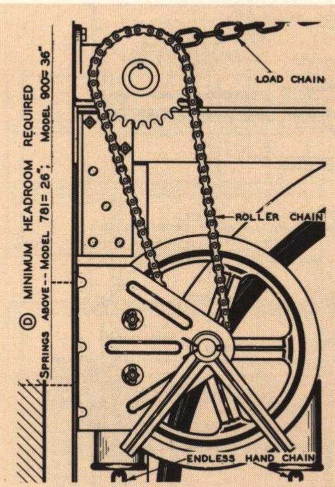
### SPECIFICATIONS

All three of the above door models are available in sizes up to and including 12'-0" wide by 14'-0" high.
All models are 1¾" thick Douglas Fir, with ¼" thick Georgia Pacific Hardboard Panels.
Doors 7'-0" wide or less are 2 panels wide, all others 3 panels wide.
All three models have Taper-Tite Track and galvanized hardware.
Sideroom Type C-1 requires 4¼".
Sideroom Type C-2 requires 5".
Headroom for Model 8811—Regular Lift is 18".
Headroom for Model 8851—High Lift is 21½".
Headroom for Model 8891—Vertical Lift is Dr. Ht. + 12".

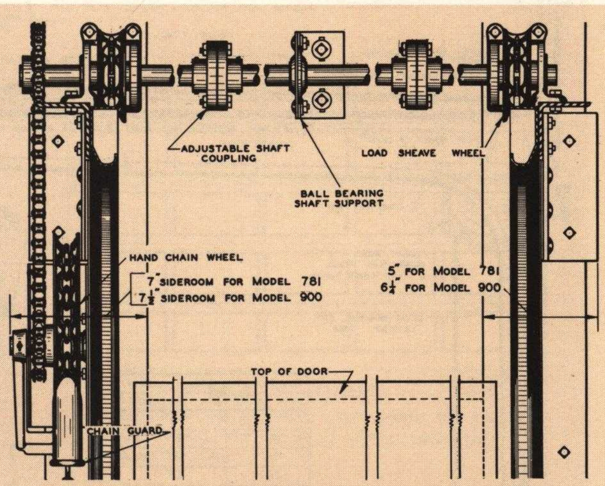
# CHAIN HOIST MODELS 10A AND 15A

## RŌ-WAY OVERHEAD DOORS

**SIDE VIEW OF CHAIN HOIST WITHOUT CLUTCH**


LOAD CHAIN
ROLLER CHAIN
ENDLESS HAND CHAIN
Ⓓ MINIMUM HEADROOM REQUIRED
SPRINGS ABOVE—MODEL 781= 26"; MODEL 900= 36"

**FRONT VIEW OF CHAIN HOIST WITHOUT CLUTCH**


ADJUSTABLE SHAFT COUPLING
LOAD SHEAVE WHEEL
BALL BEARING SHAFT SUPPORT
HAND CHAIN WHEEL
7" SIDEROOM FOR MODEL 781
7½" SIDEROOM FOR MODEL 900
5" FOR MODEL 781
6¼" FOR MODEL 900
TOP OF DOOR
CHAIN GUARD

**USES AND SPECIFICATIONS FOR 10 AND 15A HOISTS MODELS 781 AND 900**

### USE WITH MODELS 781 AND 900—EXTENSION SPRINGS ABOVE HORIZONTAL TRACKS

**USES:** Required on doors over 12' 0" high or over 17' 0" wide or over 179 square feet in area.

**DOOR MODELS:** Use with Models 781 and 900.

**ADJUSTMENT:** Adjustable shaft coupling permits adjustment to eliminate torque or twist in jackshaft—equalizes load chains—holds door sections level when lifting.

### SPECIFICATIONS—NO. 10A HOIST

**DOOR SIZE:** For areas not over 224 sq. ft.

**DOOR MODELS:** Model 781 with 2" tracking; Model 900 with 3" tracking.

**HEADROOM REQUIRED:** With Model 781 door—26"; with Model 900 door—36".

**SIDEROOM REQUIRED:** Model 781—7"; 900—7½".

**GEAR RATIO:** 7.68 to 1 reduction.

**LOAD CHAIN:** No. 4/0 matched link welded—7/32" diameter; total tensile strength 3980 lbs.

**DRIVE CHAIN:** Roller Chain No. 41—½" pitch.

**HAND CHAIN:** No. 2/0 straight link—welded.

**LOAD CHAIN WHEEL:** 3-9/32" pitch diameter—supported each side with ball bearing.

**HAND CHAIN WHEEL:** 10¼" pitch diameter—bronze bearing.

**JACK SHAFT:** For Model 781—1" diameter by 9" long on hoist side—1" diameter by 7¼" long on opposite side for load sheave wheel units; connecting shaft—1¼" diameter. For Model 900—1" diameter by 9¾" long on hoist side—1" diameter by 7¾" long on opposite side for load sheave wheel units; connecting shaft 1¼" diameter. Shafts for wide doors supplied with one or more center support bearings.

**ADJUSTMENT COUPLING:** 2 pair supplied; each coupling includes one half-coupling with 1" bore and one half-coupling with 1¼" bore.

### SPECIFICATIONS—NO. 15A HOIST

**DOOR SIZE:** For areas over 224 sq. ft.

**DOOR MODEL:** Model 900 with 3" tracking.

**HEADROOM REQUIRED:** 36" with springs above tracks. 22" with springs below tracks.

**SIDEROOM REQUIRED:** 7½".

**GEAR RATIO:** 6.1 to 1 reduction.

**LOAD CHAIN:** No. 6/0 matched link welded—9/32" diameter; total tensile strength 6840 lbs.

**DRIVE CHAIN:** Roller chain No. 50—5/8" pitch.

**HAND CHAIN:** No. 2/0 straight link—welded.

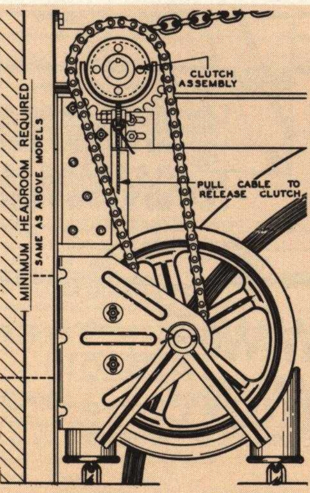
**LOAD CHAIN WHEEL:** 3-9/32" pitch diameter—supported each side with ball bearing.

**HAND CHAIN WHEEL:** 10¼" pitch diameter—bronze bearing.

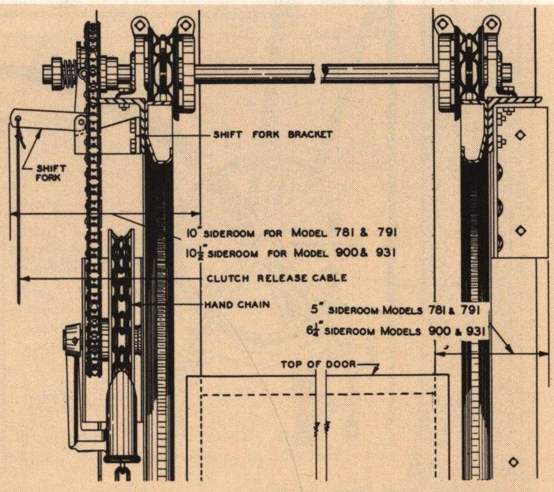
**JACK SHAFT:** 1¼" diameter by 9¾" long on hoist side—1¼" diameter by 7¾" long on opposite side for load sheave wheel units; connecting shaft 1¼" diameter—length equals door width less 8¾". Shafts for wide doors supplied with one or more center support bearings.

**ADJUSTMENT COUPLING:** 2 pair supplied—1¼" bore.

**SIDE VIEW OF CHAIN HOIST WITH CLUTCH**



**FRONT VIEW OF CHAIN HOIST WITH CLUTCH**


SHIFT FORK BRACKET
SHIFT FORK
10" SIDEROOM FOR MODEL 781 & 791
10½" SIDEROOM FOR MODEL 900 & 931
CLUTCH RELEASE CABLE
HAND CHAIN
5" SIDEROOM MODELS 781 & 791
6¼" SIDEROOM MODELS 900 & 931
TOP OF DOOR

**SPECIFICATIONS FOR 10 AND 15A HOISTS WITH CLUTCH**

**Use with Models 781, 791, 900 and 931 Doors.**

**Headroom:** Model 781 requires 26"; Model 900 requires 36". For limited headroom use Model 791 which requires 16"; or Model 931 which requires 22". These two models have springs below the tracks.

**Release Clutch:** For changing from hand chain to manual operation, may be had as optional equipment—extra charge.

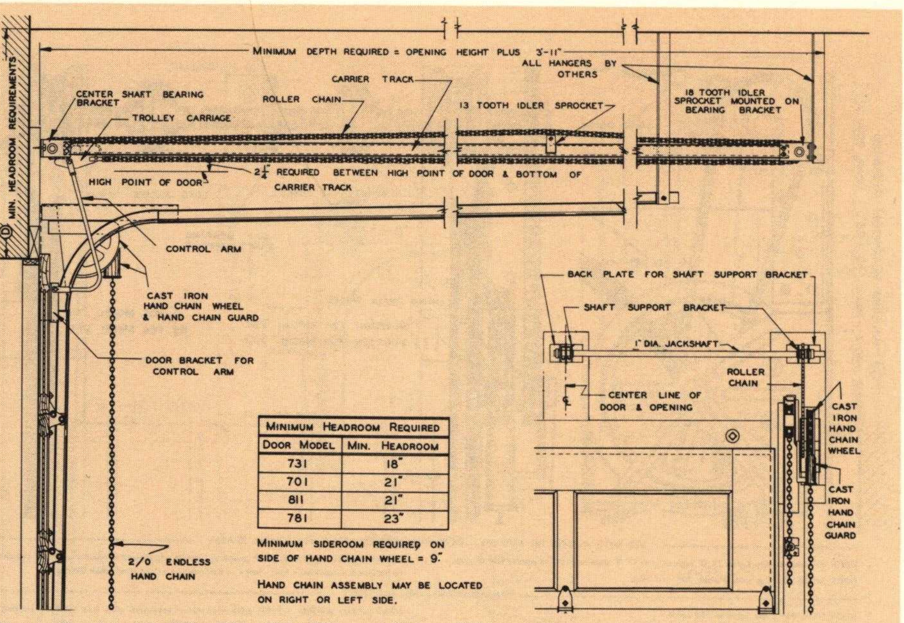
**Remaining Specifications:** All other specifications are identical to those shown above.

# CHAIN HOIST NO. 20 AND 10A AND 15A

**LIMITED HEADROOM**

## SECTIONAL VIEW OF MODEL 20 HOIST AND DOOR TRACKING

## PARTIAL INTERIOR VIEW OF MODEL 20 TROLLEY HOIST


MINIMUM DEPTH REQUIRED = OPENING HEIGHT PLUS 3'-11"
ALL HANGERS BY OTHERS
CARRIER TRACK
CENTER SHAFT BEARING BRACKET
ROLLER CHAIN
13 TOOTH IDLER SPROCKET
18 TOOTH IDLER SPROCKET MOUNTED ON BEARING BRACKET
TROLLEY CARRIAGE
2¼" REQUIRED BETWEEN HIGH POINT OF DOOR & BOTTOM OF CARRIER TRACK
HIGH POINT OF DOOR
MIN. HEADROOM REQUIREMENTS
D
CONTROL ARM
CAST IRON HAND CHAIN WHEEL & HAND CHAIN GUARD
DOOR BRACKET FOR CONTROL ARM
2/0 ENDLESS HAND CHAIN
BACK PLATE FOR SHAFT SUPPORT BRACKET
SHAFT SUPPORT BRACKET
1" DIA. JACKSHAFT
ROLLER CHAIN
CENTER LINE OF DOOR & OPENING
CAST IRON HAND CHAIN WHEEL
CAST IRON HAND CHAIN GUARD

| MINIMUM HEADROOM REQUIRED | |
|---|---|
| DOOR MODEL | MIN. HEADROOM |
| 731 | 18" |
| 701 | 21" |
| 811 | 21" |
| 781 | 23" |

MINIMUM SIDEROOM REQUIRED ON SIDE OF HAND CHAIN WHEEL = 9".

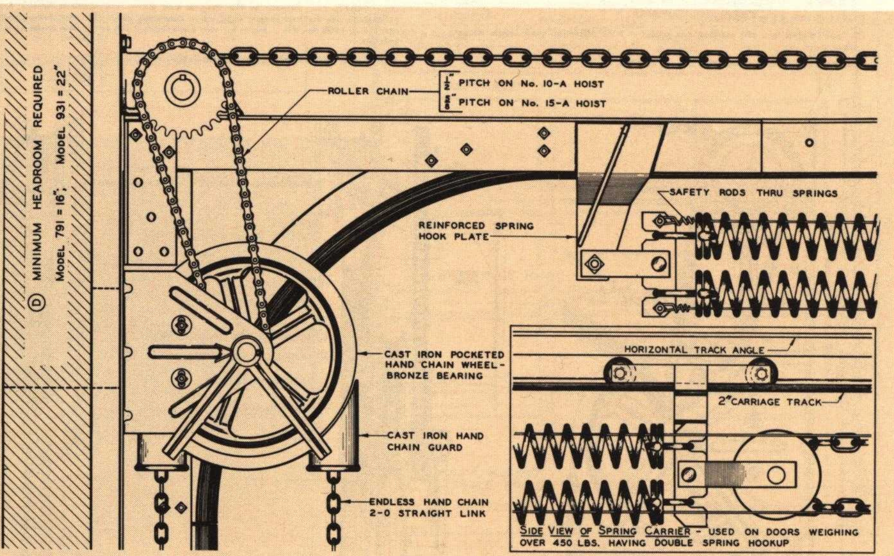
HAND CHAIN ASSEMBLY MAY BE LOCATED ON RIGHT OR LEFT SIDE.

## CHAIN HOIST NO. 20 TROLLEY TYPE

**Uses:** For Models 701, 731, 781, 791 and 811 doors where No. 10-A or 15-A Hoist cannot be used. Usually used on doors already installed.
**Location:** As shown on drawings. Hand chain may be on either right or left side.
**Headroom Required:** Model 731—18". Model 701—21" Model 811—21" Model 781—26". Model 791—22"

**Sideroom Required:** Operating side—9"; opposite side—as required by door.
**Drive:** No. 41 Roller Chain.
**Hand Chain:** No. 2/0 Straight Link Chain.
**Hand Chain Wheel:** 10¼" pitch diameter.
**Jackshaft:** 1" diameter.
**Adjustment:** No adjustments required after original installation

## 10A AND 15A HOISTS SPRINGS BELOW FOR LIMITED HEADROOM


MINIMUM HEADROOM REQUIRED
MODEL 791 = 16"; MODEL 931 = 22"
D
ROLLER CHAIN
½" PITCH ON No. 10-A HOIST
⅝" PITCH ON No. 15-A HOIST
SAFETY RODS THRU SPRINGS
REINFORCED SPRING HOOK PLATE
CAST IRON POCKETED HAND CHAIN WHEEL-BRONZE BEARING
CAST IRON HAND CHAIN GUARD
ENDLESS HAND CHAIN 2-0 STRAIGHT LINK
HORIZONTAL TRACK ANGLE
2" CARRIAGE TRACK

SIDE VIEW OF SPRING CARRIER - USED ON DOORS WEIGHING OVER 450 LBS. HAVING DOUBLE SPRING HOOKUP

## LOW HEADROOM DOORS WITH CHAIN HOISTS

### MODEL 791

**Hardware and Door Sections:** 2" tracking—similar to Model 781 except that springs are below horizontal tracks.
**Door Sizes:** Up to 224 sq. ft. in area where chain hoist is required but headroom is not sufficient for Model 781.
**Headroom Required:** Minimum 16".
**Chain Hoist:** No. 10A, see Page 19.

### MODEL 931

**Hardware and Door Sections:** 3" tracking, heavy duty hardware. Similar to Model 900 except that springs are below horizontal tracks.
**Door Sizes:** Recommended for doors over 224 sq. ft. in area where headroom is not sufficient for Model 900.
**Headroom Required:** Minimum 22".
**Chain Hoist:** No. 15A. See Page 19.

**MILLWORK**

# Rō-WAY

## OVERHEAD DOORS

*Light Commercial Construction*

*Heavy Commercial Construction*

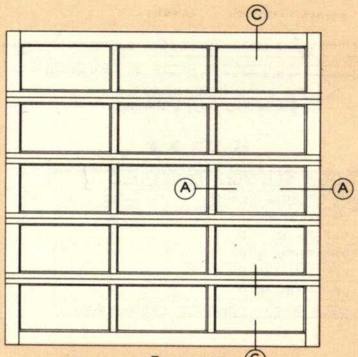


Fig. 1 —Elevation

Elevation and sectional views shown for Fig. 1 are typical for doors of light commercial construction.

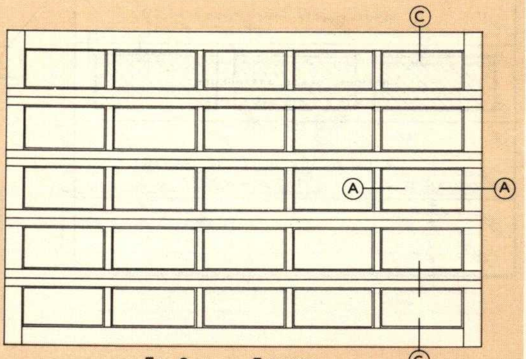
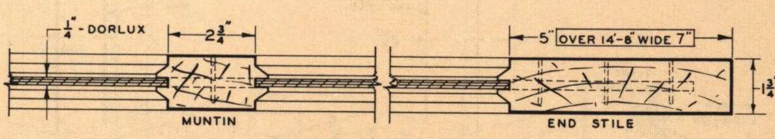


Fig. 2 — Elevation

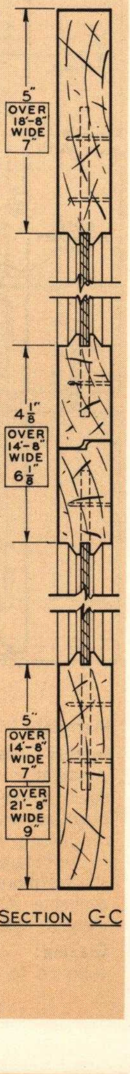
Elevation and sectional views shown for Fig. 2 are typical for doors of heavy commercial construction.

**MUNTIN AND END STILE LIMITATIONS**



Section A-A

**RAIL LIMITATIONS**


5" OVER 18'-8" WIDE 7"
4 1/8" OVER 14'-8" WIDE 6 1/8"
5" OVER 14'-8" WIDE 7" OVER 21'-8" WIDE 9"

Section C-C

**PANEL AND SECTION LIMITATIONS**

| Panel Schedule | | Section Schedule | |
|---|---|---|---|
| Opening Width | No. of Panels | Opening Height | No. of Sections |
| up to 7'-0" | 2 | 4'-6 1/8" to 6'-6" | 3 |
| 7'-0 1/8" to 10'-6" | 3 | 6'-6 1/8" to 8'-6" | 4 |
| 10'-6 1/8" to 12'-6" | 4 | 8'-6 1/8" to 10'-6" | 5 |
| 12'-6 1/8" to 14'-6" | 5 | 10'-6 1/8" to 12'-6" | 6 |
| 14'-6 1/8" to 16'-6" | 6 | 12'-6 1/8" to 14'-6" | 7 |
| 16'-6 1/8" to 20'-6" | 8 | 14'-6 1/8" to 16'-6" | 8 |
| 20'-6 1/8" to 24'-6" | 10 | 16'-6 1/8" to 18'-6" | 9 |
| 24'-6 1/8" to 28'-6" | 12 | 18'-6 1/8" to 20'-6" | 10 |

**SPECIFICATIONS**

Doors as shown in figures 1 & 2 shall have stiles, rails and muntins built of Douglas Fir, Sitka Spruce, Ponderosa Pine or Upland Hemlock (Rowe Option).

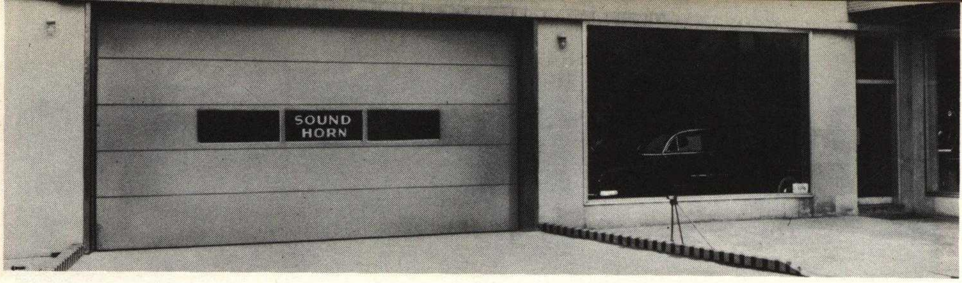
Panels shall be 1/4" - dorlux.

All door joints are blind mortise and tenon, steel doweled and waterproof glued.

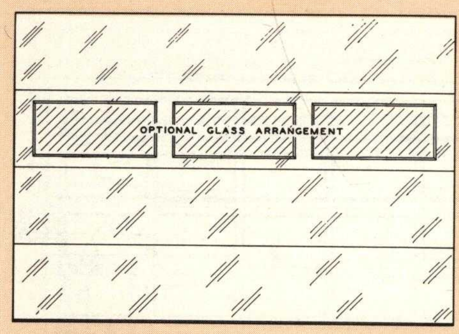
Any one or all sections may be left open for glass or panels may be used throughout. Glass and glazing not regularly included. Kind of glass must be specified.

Special section and panel design will be furnished upon request.

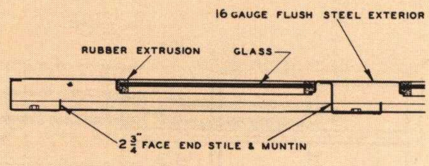
# STEEL DOOR CUSTOM DESIGN



**EXTERIOR ELEVATION FLUSH STEEL SECTIONS**



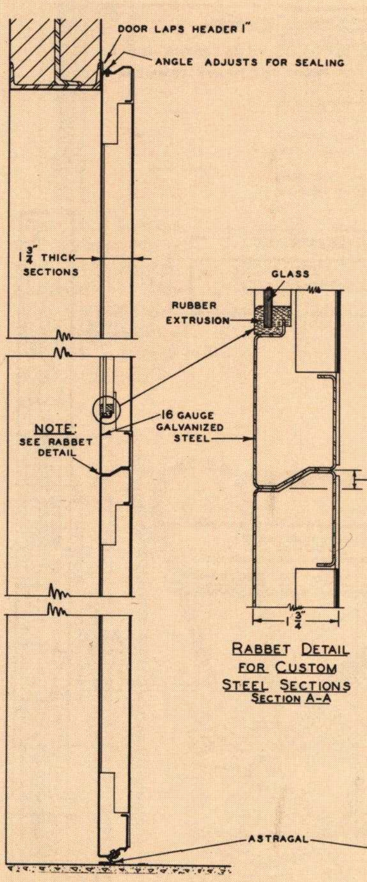
**SECTIONAL VIEW THRU END STILE AND MUNTIN**



SECTION B-B

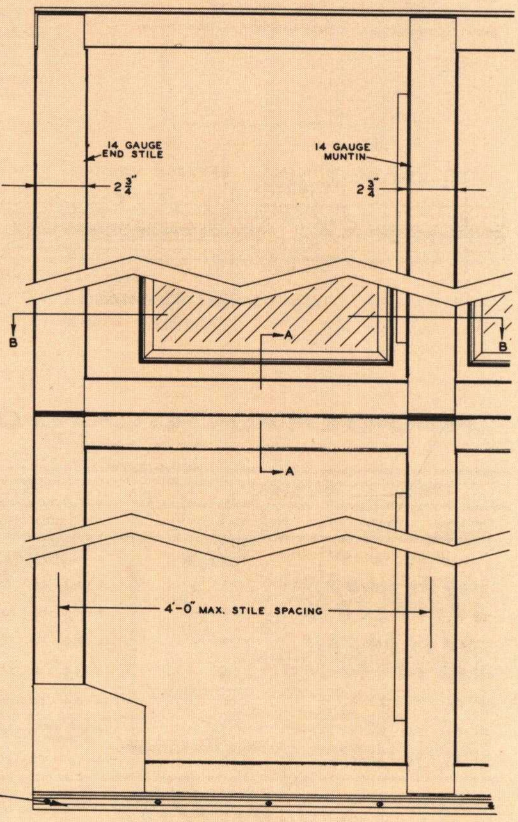
| DOOR SECTION SCHEDULE | |
|---|---|
| DOOR OPENING HEIGHT | No. OF SECTIONS |
| UP TO 8'-0" | 4 |
| 8'-1" THRU 10'-0" | 5 |
| 10'-1" THRU 12'-0" | 6 |
| 12'-1" THRU 14'-0" | 7 |
| 14'-1" THRU 16'-0" | 8 |
| OVER 16'-0"-- CONSULT ENGINEERING | |

**SECTIONAL VIEW THRU DOOR AND OPENING**



RABBET DETAIL FOR CUSTOM STEEL SECTIONS
SECTION A-A

**INTERIOR CUTAWAY ELEVATION OF SECTIONS**



**SPECIFICATIONS**

**Material:** Muntins 14 gauge; outer skin 16 gauge galvanized paintgrip steel.

**Section Construction:** Door sections 1¾" thick shall be flush on exterior side. All sections have a rabbet or shiplap waterseal on top and bottom edges. All welded joints on sections dressed down smooth. Top section has a sealing angle which can be adjusted. Bottom section is provided with a full length astragal for sealing door to floor. Doors over 12' 2" wide have reinforcing member welded to rail, forming integral part of section. All sections are designed to withstand a wind pressure of 20 pounds per square foot. Vertical muntins shall not be spaced more than 4' 0" apart. Exterior face of door has no exposed hinge bolts. Pass doors available 30" wide × 69½" high, located within the 48" stile spacing on right side of door viewed from the interior.

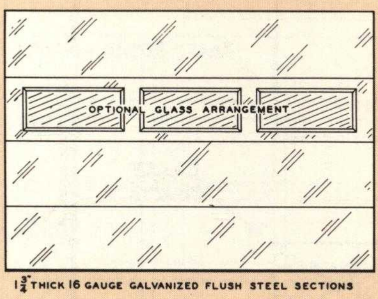
**Glazing:** Where sections are designated to be open for glass a rubber extrusion shall be supplied to fit in steel frame providing glass with a watertight seal.

## STEEL DOOR STANDARD DESIGN

# Rō-WAY

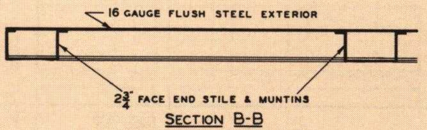
## OVERHEAD DOORS

**EXTERIOR ELEVATION FLUSH STEEL SECTIONS**



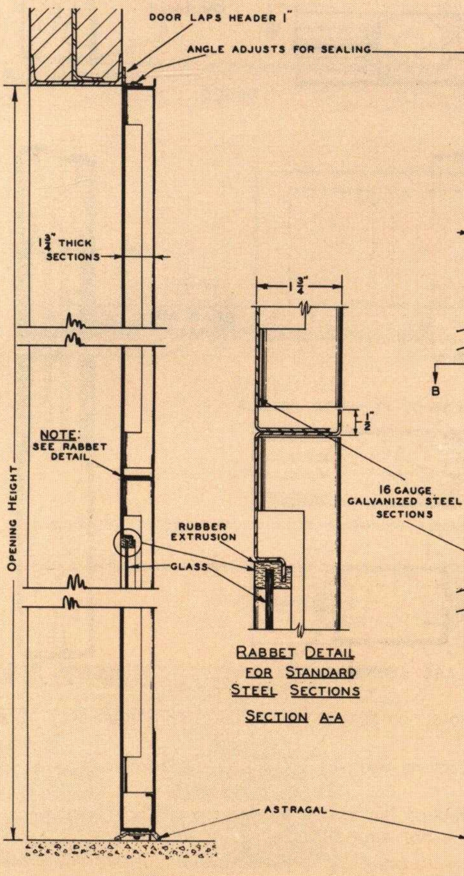
1¾" THICK 16 GAUGE GALVANIZED FLUSH STEEL SECTIONS

**SECTIONAL VIEW THRU END STILE AND MUNTIN**



| DOOR SECTION SCHEDULE | |
|---|---|
| DOOR OPENING HEIGHT | No. OF SECTIONS |
| UP TO 8'-6" | 4 |
| 8'-7" THRU 10'-6" | 5 |
| 10'-7" THRU 12'-6" | 6 |
| 12'-7" THRU 14'-6" | 7 |
| 14'-7" THRU 16'-6" | 8 |
| OVER 16'-6" -- CONSULT ENGINEERING | |

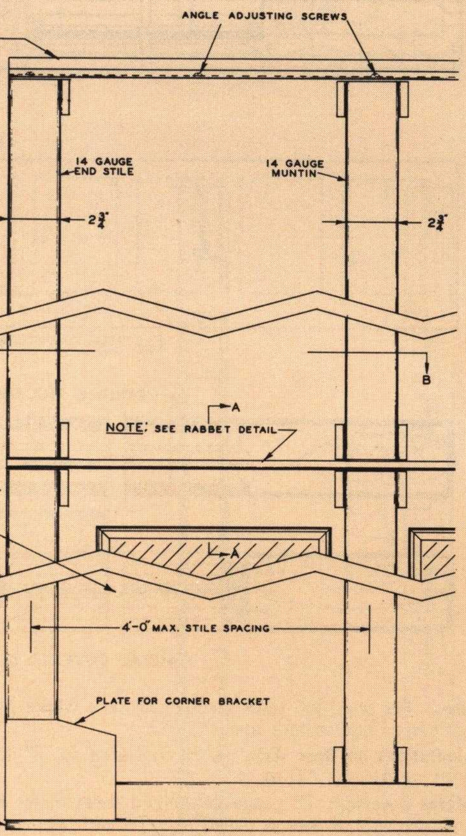
**SECTIONAL VIEW THRU DOOR AND OPENING**



RABBET DETAIL FOR STANDARD STEEL SECTIONS

SECTION A-A

**INTERIOR CUTAWAY ELEVATION OF SECTIONS**



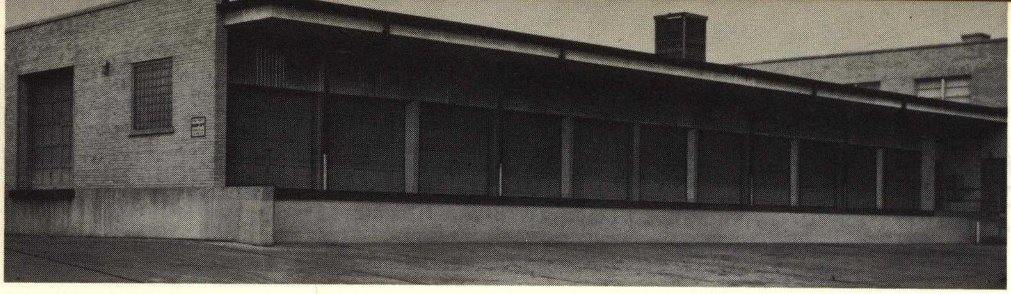
**SPECIFICATIONS**

**Material:** Muntins 14 gauge; outer skin 16 gauge galvanized paintgrip steel.

**Section Construction:** Door sections shall be flush on exterior side with ½" high rabbet at section joints. Vertical muntins not spaced more than 4' 0" apart. Top edge of door is provided with an adjustable sealing angle, while bottom edge is equipped with a rubber astragal. All doors over 10' 6" wide shall have reinforcing member welded to section rail—forming integral part of door section. All welded joints on sections dressed down smooth. Exterior face of door has no exposed hinge bolts. Pass doors are available 30" × 69½" high—located within the 48" stile spacing on right side of door viewed from inside.

**Glazing:** Where sections are designated to be open for glass a rubber extrusion shall be supplied to fit in steel frame providing glass with water-tight seal.

# METAL COVERED DOORS



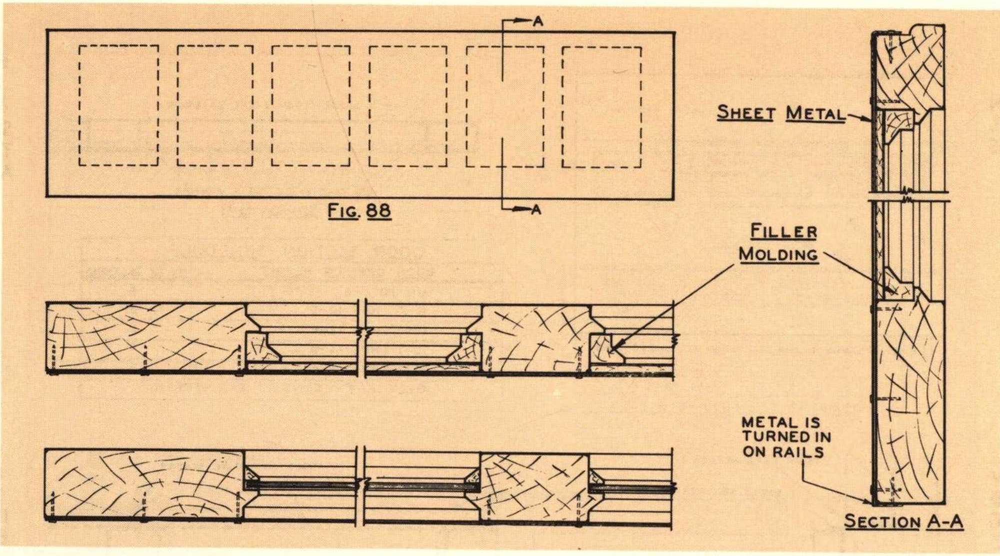
**GALVANIZED SHEET METAL ONE SIDE ONLY**

**EXTERIOR ELEVATION BOTTOM SECTION**

**SECTION THRU END STILE PANEL AND MUNTIN**

**SECTION THRU GLASS OPENING**

**SECTION THRU RAILS AND FILLER**



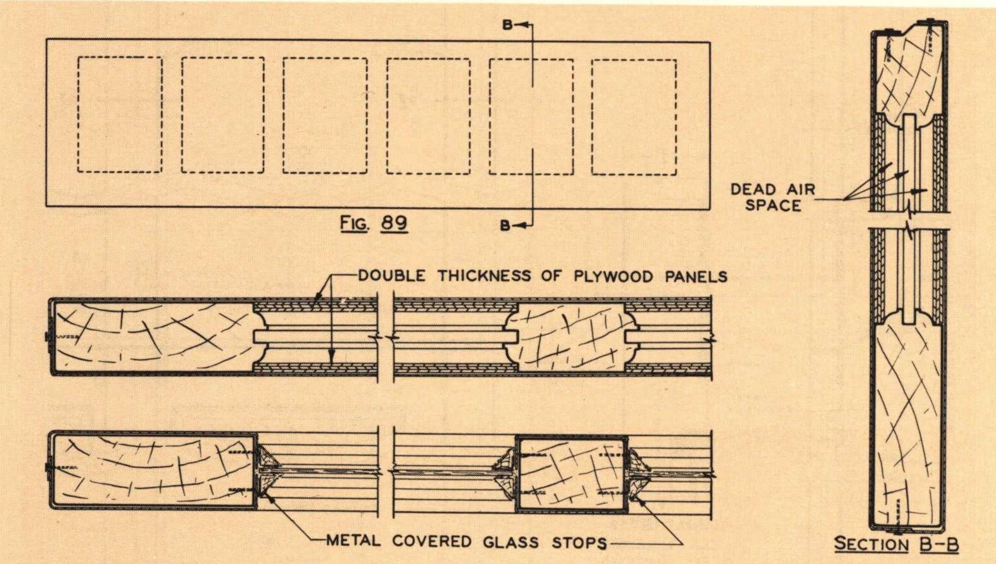
**GALVANIZED SHEET METAL BOTH SIDES**

**INTERIOR ELEVATION BOTTOM SECTION**

**SECTION THRU END STILE PANEL AND MUNTIN**

**SECTION THRU GLASS OPENING**

**SECTION THRU RAILS AND PANELS**



**NO. 44 METAL COVERED DOORS COVERED INSIDE ONLY**

**Uses:** For any 1¾" thick commercial door where protection against fire or burglary is required. (Does not carry Underwriters label.)

**Limitations on Door Area.** Maximum area for 2" tracking doors is 150 sq. ft. Maximum area for 3" tracking doors is 250 sq. ft.

**Metal Covering:** 28 gauge galvanized sheet metal applied flat to the inside face of door. Covering on only one side of door is nailed to stiles and rails but is not turned over edges of sections.

**Panels:** A filler molding is inserted in panel openings to bring ¼" plywood panels out flush with door surface. This permits metal to lay on flat.

**Glass Sections:** May be had for any sections or panels (extra charge). Always indicate which sections are to be left open for glass.

**Wood Glass Stops:** Are included as standard equipment for glass sections unless otherwise specified.

**Vertical Tracks:** Regularly mounted on continuous angles.

**NO. 46 METAL COVERED DOORS COVERED OUTSIDE ONLY**

**Metal Covering:** 28 gauge galvanized sheet metal applied flat to the outside face of door. Covering only one side of door is nailed to stiles and rails and is turned over edges of rails but not end stiles.

**Other Construction and Limitations:** Same as No. 44 described above.

**NO. 48 METAL COVERED DOORS COVERED BOTH SIDES AND EDGES**

**Metal Covering:** 28 gauge galvanized sheet metal is applied flat to both sides of the door. Sheet metal covering is also turned over edges of sections and nailed to stiles and rails.

**Limitations on Door Area:** Maximum area for 2" tracking doors is 130 sq. ft. Maximum area for 3" tracking doors is 200 sq. ft.

**Metal Covered Glass Stops:** Furnished for each glass opening on all doors metal covered on both sides.

**Other Construction:** Same as No. 44 described above.

**EXTERIOR ELEVATION FLUSH BOTTOM**

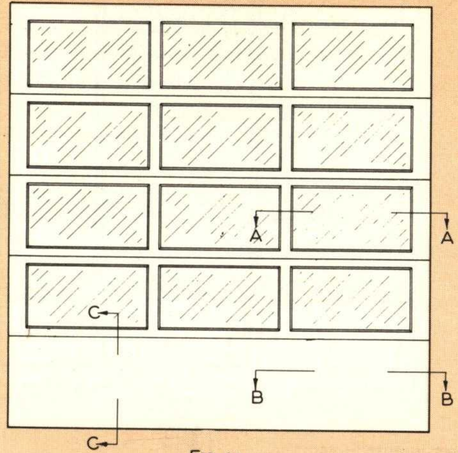


FIG. 93

**EXTERIOR ELEVATION PANEL BOTTOM**

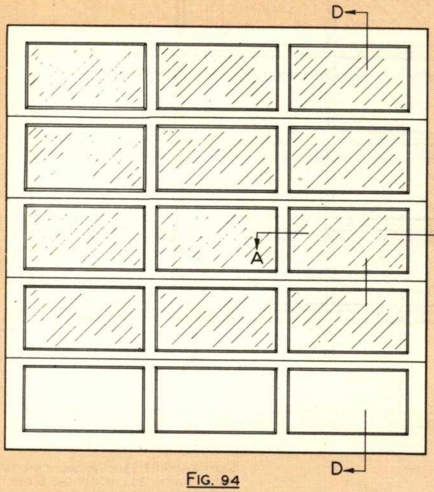
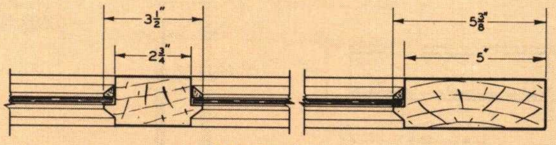
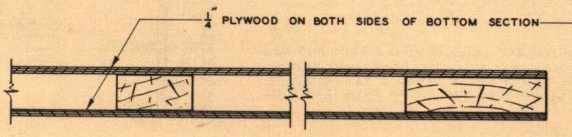


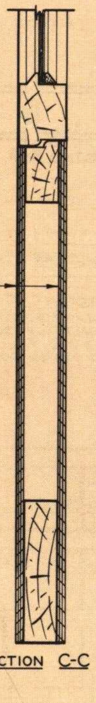
FIG. 94



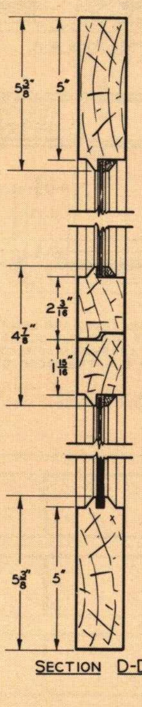
SECTION A-A



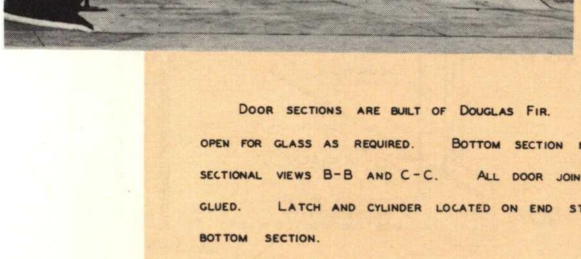
SECTION B-B



SECTION C-C

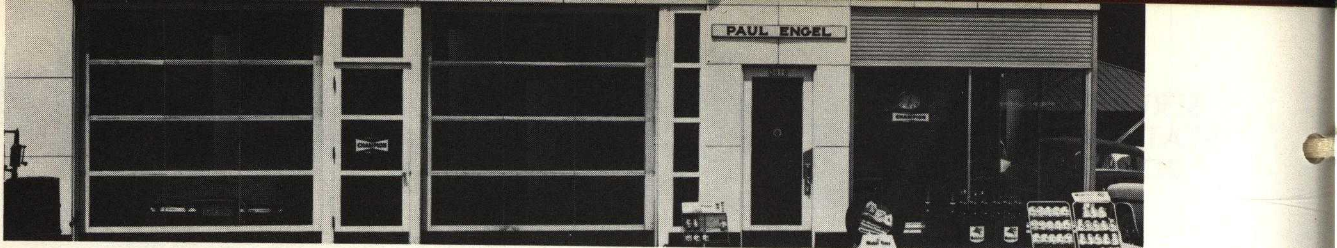


SECTION D-D



Door sections are built of Douglas Fir. All plywood is 3 ply laminated Fir. Sections may be left open for glass as required. Bottom section may be flush type with plywood facing as shown in Fig.93 and sectional views B-B and C-C. All door joints are blind mortise and tenon, steel doweled and waterproof glued. Latch and cylinder located on end stile of second section. Section D-D shows Dorlux panels in bottom section.

# SERVICE STATION DOORS



## *Wood Muntins*

**EXTERIOR ELEVATIONS**

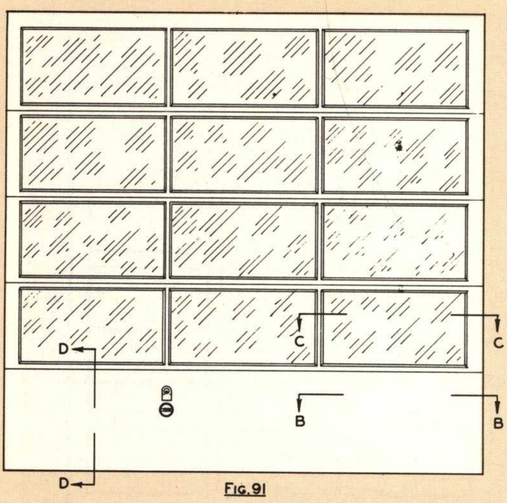


Fig. 91

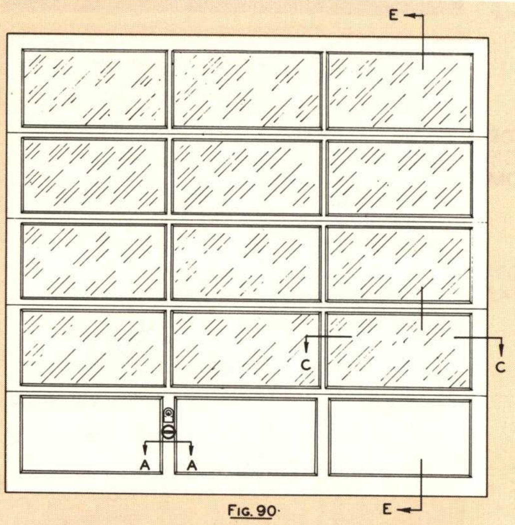
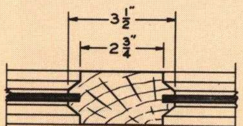
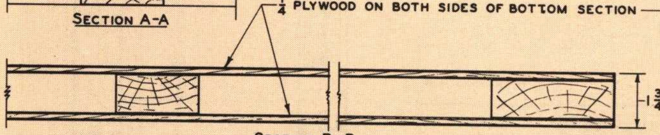


Fig. 90

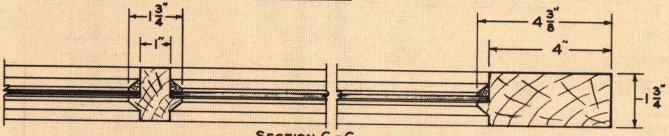
Section A-A is typical for muntins in bottom section only when plywood or Dorlux panels prevail. Muntins are wider to accommodate locking equipment. When all sections are open for glass, muntins in bottom section are narrow as shown in section C-C and locking equipment is located on end stile of second section.



Section A-A

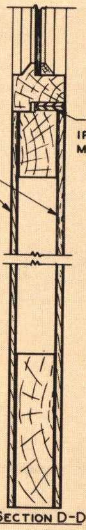


Section B-B

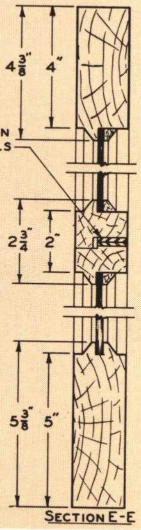


Section C-C

Door sections are built of Douglas Fir. Plywood is 3 ply laminated Fir. Sections may be left open for glass as required. Bottom section may be flush type with plywood facing as shown in sections B-B & D-D. All door joints are mortise & tenon, steel pinned & waterproof glued. This design not recommended for doors over 10'-6" wide.



Section D-D



Section E-E

**ALUMINUM MUNTINS**

**EXTERIOR ELEVATION**

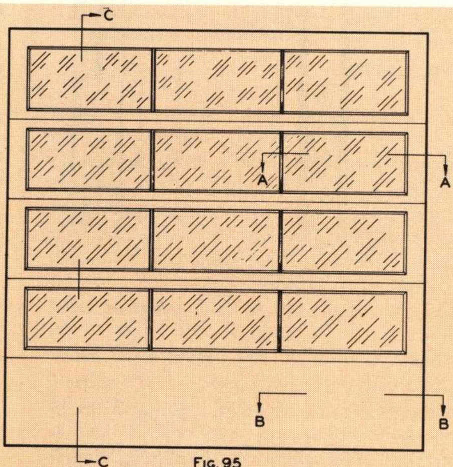
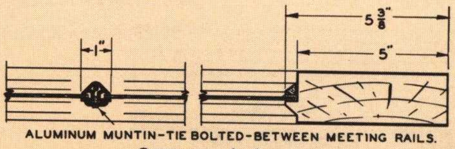
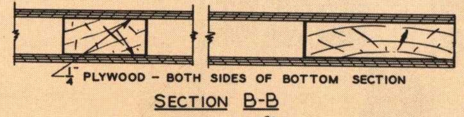


Fig. 95

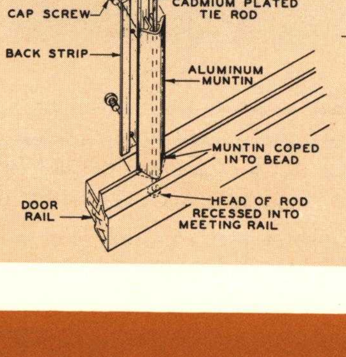
Stiles & rails are built of Douglas Fir. Joints are mortise & tenon, steel doweled & waterproof glued. All plywood is 3 ply laminated Fir. Bottom section flush type as shown. Latch & cylinder lock located on end stile of second section.

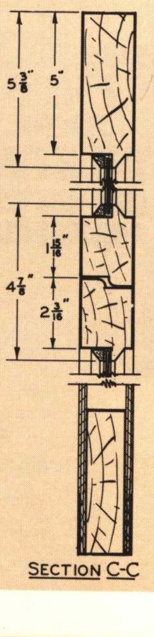


Section A-A



Section B-B


Cap screw
Full length cadmium plated tie rod
Back strip
Aluminum muntin
Muntin coped into bead
Door rail
Head of rod recessed into meeting rail



Section C-C

**SERVICE STATION DOORS**

*Plastic Muntins*

# Rō-WAY

**OVERHEAD DOORS**

**INTERIOR ELEVATIONS**

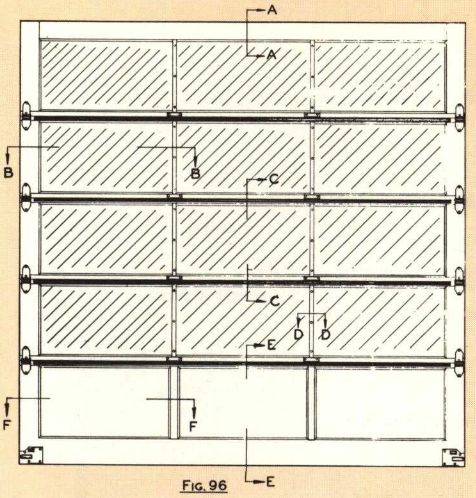


Fig. 96

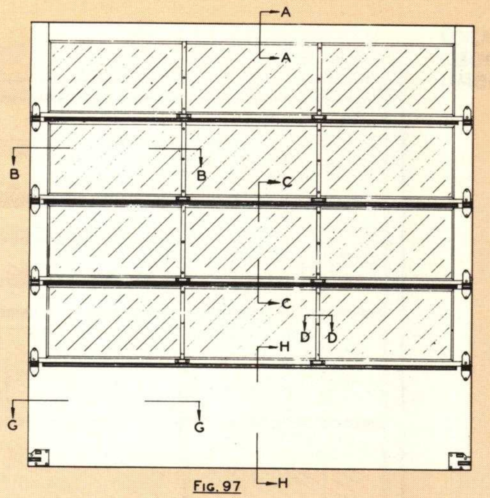
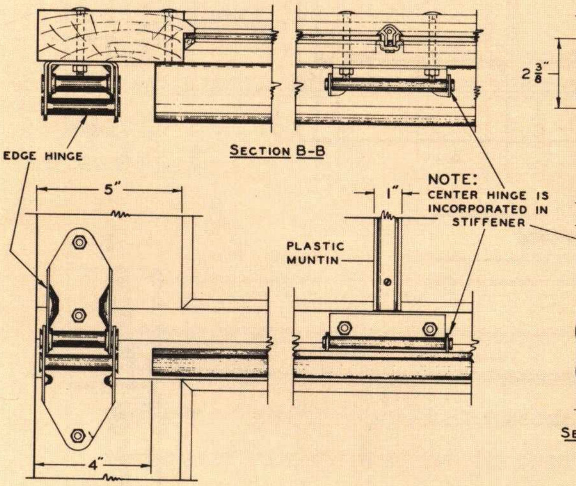
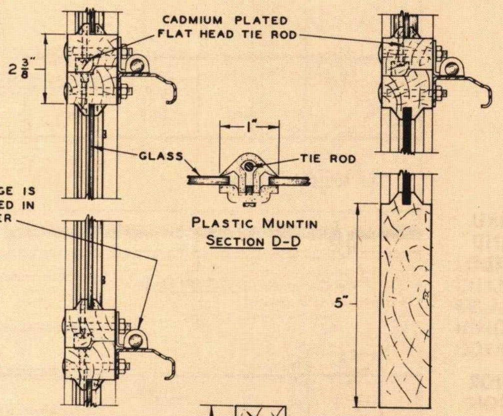


Fig. 97

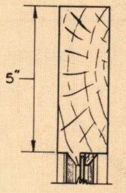
**INTERIOR VIEW OF EDGE AND CENTER HINGES**



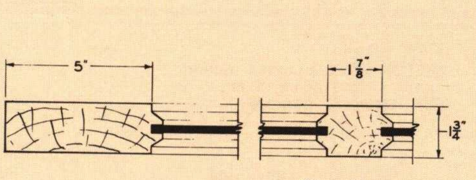


Section C-C

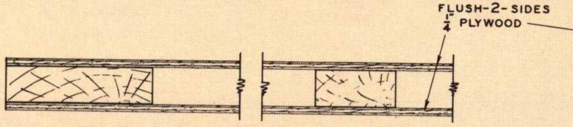
Section E-E



Section A-A



Section F-F



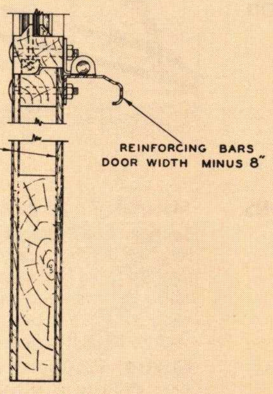
Section G-G

Joints in door sections are mortised and tenoned, steel doweled and waterproof glued.

Glass openings are divided by 1" plastic muntins-locked in place by cadmium plated tie rods which pass thru entire length of muntin.

Bottom section can be paneled as shown in Fig. 96 or can be flush plywood as in Fig. 97.

Latch and cylinder lock located on end stile of second section. One lock bar engaging notch in track.



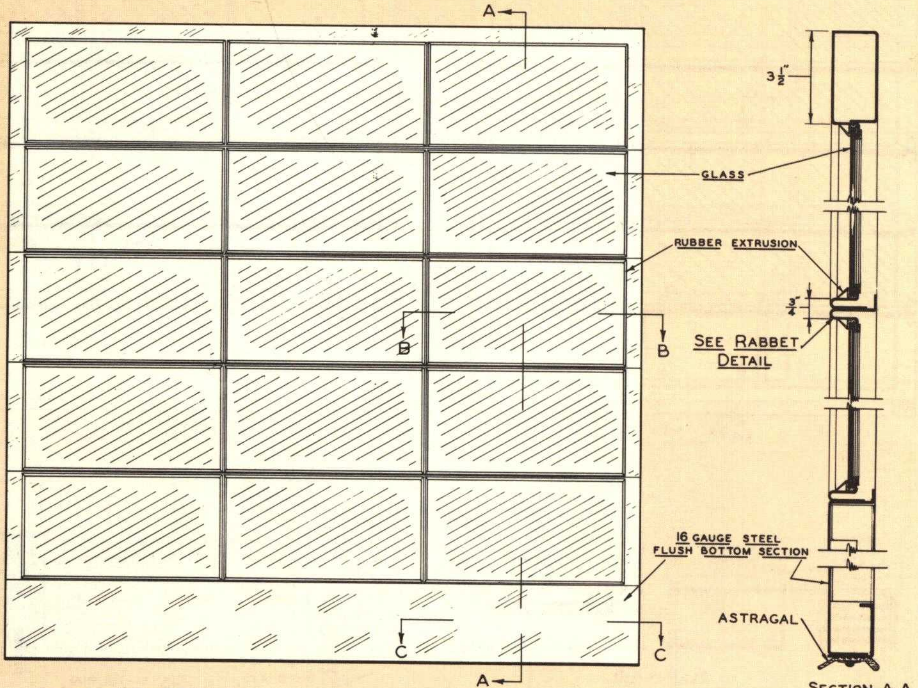
Section H-H

# SERVICE STATION DOORS

*Steel Narrowline*

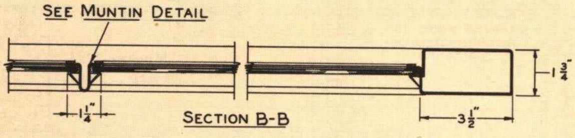
**EXTERIOR ELEVATION**

**SECTION THRU DOOR RAILS**



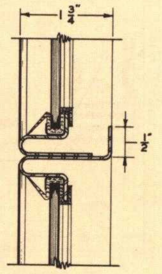
SECTION A-A

**SECTION THRU GLASS MUNTIN AND END STILE**

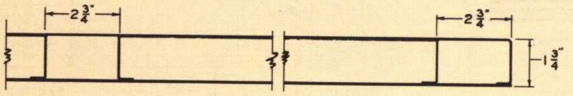


SECTION B-B

**RABBET DETAIL**

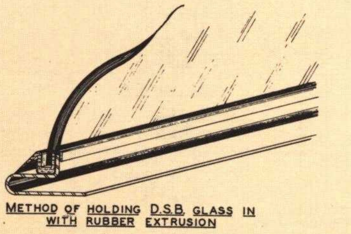


**FLUSH EXTERIOR BOTTOM SECTION**

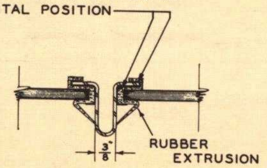


SECTION C-C

**GLAZING METHOD**



METHOD OF HOLDING D.S.B. GLASS IN WITH RUBBER EXTRUSION



NOTE: STEEL BACKING BEHIND GLASS WHEN DOOR IS OPEN-OR IN HORIZONTAL POSITION

**SPECIFICATIONS**

**Material:** 16 gauge galvanized paintgrip steel.

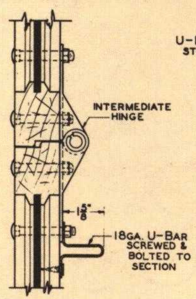
**Section Construction:** Door shall have flush bottom section which varies in height with door height. Muntins are not more than 4'-0" on centers. Top and intermediate sections have an aggregate of ¾" face meeting rails. ⅜" face vertical muntins and 3½" face stiles and top rail. All welded joints dressed down smooth. Rabbet heights are approximately ½" high at section joints. Bottom edge of door is equipped with a continuous rubber astragal. Exterior face of door has no exposed hinge bolts.

**Glazing:** Positive steel frame under glass when doors are in horizontal position. Rubber mounting type molding is supplied for glass openings. Rubber mounting requires DS type glass.

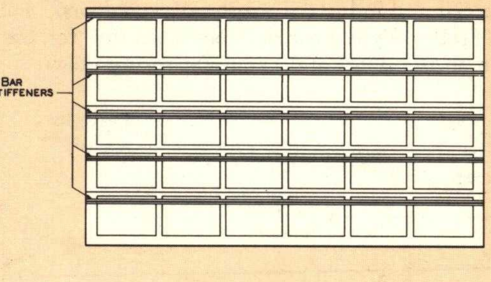
## REINFORCING FOR DOOR SECTIONS

# Rō-WAY OVERHEAD DOORS

**SECTIONAL VIEW SHOWING U-BAR AND HINGE**

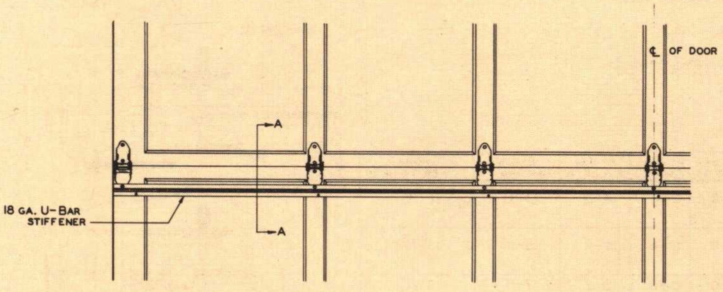


SECTION A-A

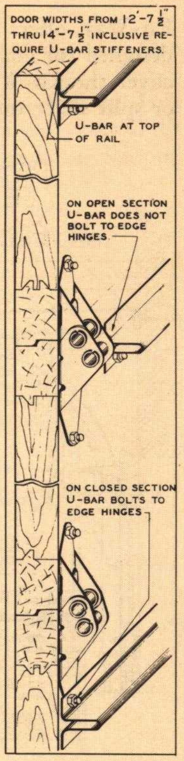


INTERIOR ELEVATION SHOWING U-BARS

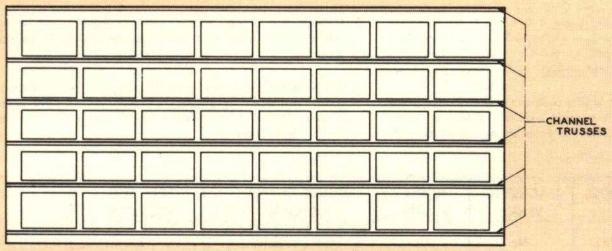
**PARTIAL INTERIOR ELEVATION OF U-BAR AND HINGES**



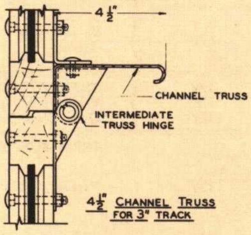
**LOCATION AND LIMITATIONS OF U-BAR STIFFENERS**


DOOR WIDTHS FROM 12'-7 1/2" THRU 14'-7 1/2" INCLUSIVE REQUIRE U-BAR STIFFENERS.
U-BAR AT TOP OF RAIL
ON OPEN SECTION U-BAR DOES NOT BOLT TO EDGE HINGES.
ON CLOSED SECTION U-BAR BOLTS TO EDGE HINGES

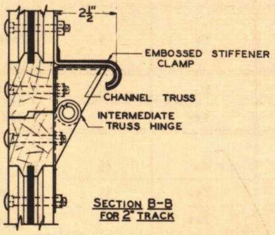
**INTERIOR ELEVATION SHOWING CHANNEL STIFFENERS**



**SECTIONAL VIEW SHOWING CHANNEL AND HINGE**

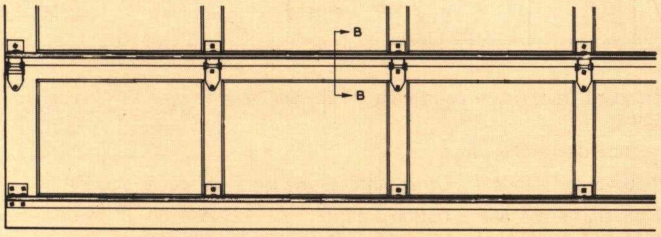


4 1/2" CHANNEL TRUSS FOR 3" TRACK

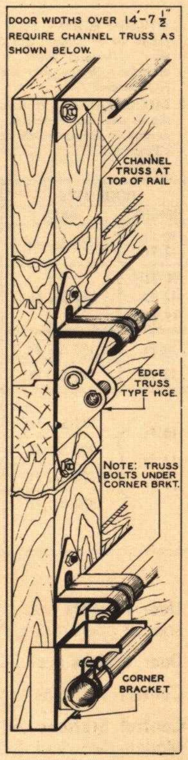


SECTION B-B FOR 2" TRACK

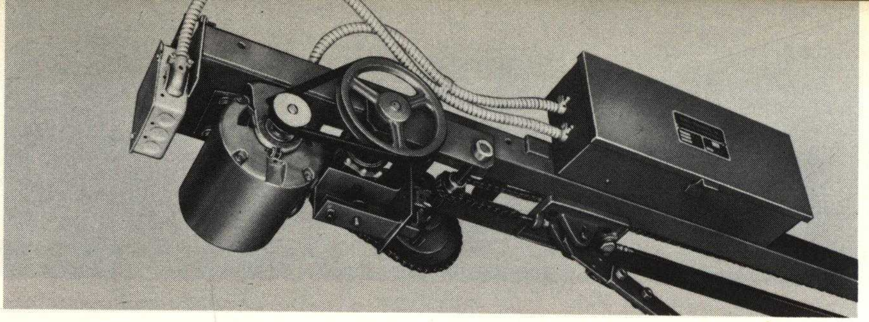
**PARTIAL INTERIOR ELEVATION SHOWING CHANNEL TRUSS**



**LOCATION OF CHANNELS RELATIVE TO HINGES AND CORNER BRACKETS**

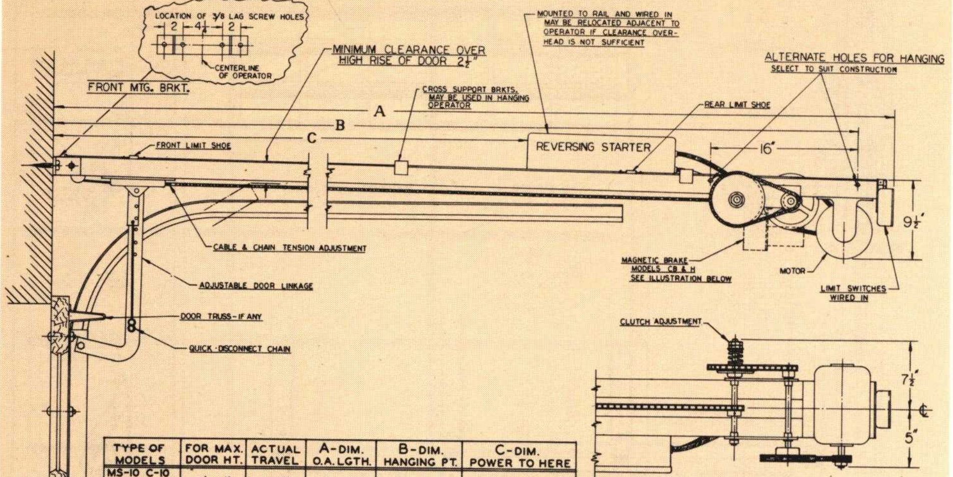

DOOR WIDTHS OVER 14'-7 1/2" REQUIRE CHANNEL TRUSS AS SHOWN BELOW.
CHANNEL TRUSS AT TOP OF RAIL
EDGE TRUSS TYPE HGE.
NOTE: TRUSS BOLTS UNDER CORNER BRKT.
CORNER BRACKET

# TROLLEY TYPE ELECTRIC DOOR OPERATORS

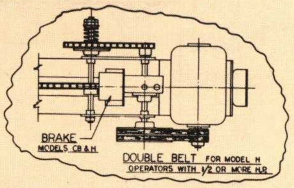


Ro-Way offers a complete line of time-tested Electric Door Operators especially designed for commercial and industrial overhead type doors. Following specifications cover the Ro-Way Trolley Type Electric Door Operator for use on continuous shaft or split shaft torsion spring doors and extension spring doors.

## AREA REQUIRED FOR OPERATOR


LOCATION OF 3/8 LAG SCREW HOLES
2
4½
2
CENTERLINE OF OPERATOR
FRONT MTG. BRKT.
MINIMUM CLEARANCE OVER HIGH RISE OF DOOR 2½"
CROSS SUPPORT BRKTS. MAY BE USED IN HANGING OPERATOR
MOUNTED TO RAIL AND WIRED IN MAY BE RELOCATED ADJACENT TO OPERATOR IF CLEARANCE OVER-HEAD IS NOT SUFFICIENT
ALTERNATE HOLES FOR HANGING SELECT TO SUIT CONSTRUCTION
A
B
C
REAR LIMIT SHOE
FRONT LIMIT SHOE
REVERSING STARTER
16"
9½"
CABLE & CHAIN TENSION ADJUSTMENT
ADJUSTABLE DOOR LINKAGE
DOOR TRUSS-IF ANY
QUICK-DISCONNECT CHAIN
MAGNETIC BRAKE MODELS CB & H SEE ILLUSTRATION BELOW
MOTOR
LIMIT SWITCHES WIRED IN
CLUTCH ADJUSTMENT
7½"
℄
5"

| TYPE OF MODELS | FOR MAX. DOOR HT. | ACTUAL TRAVEL | A-DIM. O.A. LGTH. | B-DIM. HANGING PT. | C-DIM. POWER TO HERE |
|---|---|---|---|---|---|
| MS-10 C-10<br>M-10 CB-10<br>MB-10 H-10<br>SC-10 | 10'-0" | 11'-8" | 14'-3" | 13'-11" | 11'-11" |
| MS-12 C-12<br>M-12 CB-12<br>MB-12 H-12<br>SC-12 | 12'-0" | 13'-8" | 16'-3" | 15'-11" | 13'-11" |
| C-14 CB-14<br>H-14 SC-14 | 14'-0" | 15'-8" | 18'-3" | 17'-11" | 15'-11" |



## TROLLEY AND JACKSHAFT OPERATOR FEATURES

1. **EFFICIENT POWER** — Roller Chain Drive and V-Belt and Pulley Reduction permit use of standard type motor on both trolley and jackshaft type operators. Maximum power is developed to provide years of trouble-free operation. Worm gears and gear-head motors, which waste power, are NOT used.
2. **SAFE OPERATION** — If moving door strikes obstruction, built-in clutch will slip to stop door movement. Clutch is easily adjusted by turning nut to increase or decrease clutch tension. Motor is protected against overload by a Fusetron.
3. **ECONOMY** — Ro-Way Electric Door Operators speed up traffic; save heat; reduce door maintenance. Sound engineering holds maintenance cost to a minimum.
4. **CONVENIENCE** — Doors powered with Ro-Way Electric Operators are opened and closed by pushing a control button. No physical effort need be used. In case of power failure, electric operator can be released for manual or chain hoist operation.

## COMMERCIAL TROLLEY TYPE

| DOOR SIZE HEIGHT | DOOR SIZE AREA | MODEL | MAGNETIC BRAKE | HORSE POWER | POWER SUPPLY (60 Cycle) | CONTROL VOLTAGE | CONTROLS |
|---|---|---|---|---|---|---|---|
| 10 Ft.<br>12 Ft. | 150 Sq. Ft. | MS | No | ⅓ | 115V - 1 phase | 12V | SINGLE BUTTON<br>Vemco #320-024 |
| 10 Ft.<br>12 Ft.<br>14 Ft. | 175 Sq. Ft. | SC | No | ⅓ | 230V - 1 phase | 12V | No mid-cycle reverse |
| 10 Ft. | 150 Sq. Ft. | M | No | ⅓ | 115V - 1 phase<br>230V - 1 phase<br>220V - 3 phase | 12V<br>12V<br>12V | THREE BUTTON<br>Vemco #320-023<br>"Open - Close - Stop" |
| 12 Ft. | 175 Sq. Ft. | MB | Yes | ⅓ | | | |

## INDUSTRIAL TROLLEY TYPE

| DOOR SIZE HEIGHT | DOOR SIZE AREA | MODEL | MAGNETIC BRAKE | HORSE POWER | POWER SUPPLY (60 Cycle) | CONTROL VOLTAGE | CONTROLS |
|---|---|---|---|---|---|---|---|
| 10 Ft. | 175 Sq. Ft. | C | No | ⅓ | | | THREE BUTTON |
| 12 Ft. | 200 Sq. Ft. | CB | Yes | ⅓ | 115V - 1 phase<br>230V - 1 phase | 12V | Vemco #320-023 |
| 14 Ft. | 300 Sq. Ft. | H | Yes | ½ | 220V - 3 phase<br>440V - 3 phase<br>550V - 3 phase | 110V | G-E #320-039<br>"Open - Close - Stop" |
| | 400 Sq. Ft. | H | Yes | ¾ | | | |

**Door Heights** shown use standard trolley type equipment. For door heights over 14' and up to 18' special operators are available.

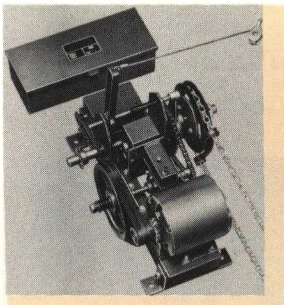
**Door Widths** over 28 feet require dual trolley drive.

**Control Voltages** indicated above are standard. Other voltages available on special request.

**Control Stations** indicated on charts are one 3-button interior type included on all models except Models MS and SC. These two models are equipped with single button control stations. For additional stations see Page 32.

**NOTE** **See Page 32 for Guarantee and Architect's Specifications.**

# JACKSHAFT TYPE ELECTRIC DOOR OPERATORS

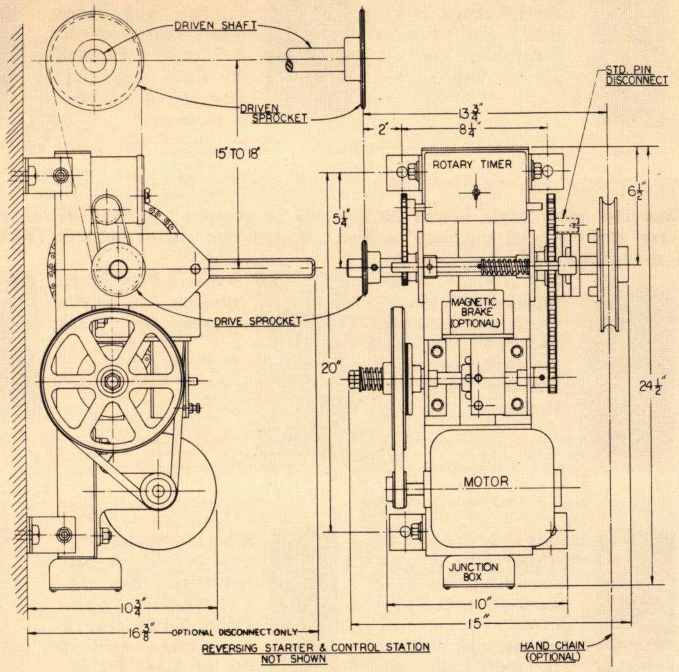


Ro-Way offers a complete line of time-tested Electric Door Operators especially designed for commercial and industrial overhead type doors. Following specifications cover the Jackshaft Type Electric Door Operator for use on vertical lift and high lift torsion spring doors and chain hoist equipped extension spring doors.

## STANDARD EQUIPMENT

| | |
|---|---|
| **MOTOR** | General Electric Form "G"—capacitor or split phase or polyphase induction type. See chart above. |
| **FRICTION CLUTCH** | Stops movement if door is obstructed. |
| **MAGNETIC BRAKE** | Solenoid operated brake holds door in any position—prevents excessive coast. Supplied on all Ro-Way Jackshaft Type Electric Door Operators. On Trolley models see chart page 30. |
| **DISCONNECT** | Permits quick transfer to manual or chain hoist operation. |
| **LIMIT SWITCHES** | Micro type limit switches are used on both Trolley and Jackshaft Operators. |
| **STARTER** | Allen - Bradley, Struthers - Dunn, or Potter - Brumfield. |
| **MOTOR PROTECTION** | G-E Overloads on 440 volt; Bussman Fusing on others. |

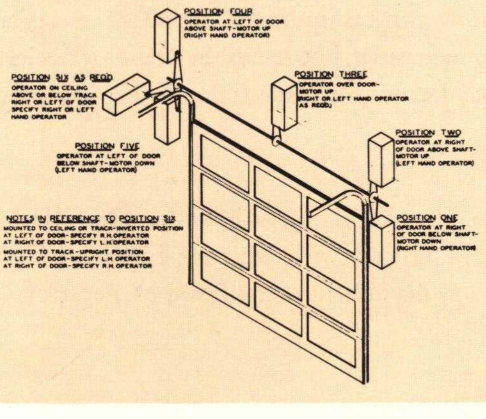
## AREA REQUIRED FOR OPERATOR



## JACKSHAFT OPERATOR SPECIFICATIONS

| Door Size | Model | Horse-Power | Power Supply (1) (60 Cycle) | Control (2) Voltage | Three-Button Station | Magnetic Brake | Chain Hoist |
|---|---|---|---|---|---|---|---|
| Up to 200 Sq. Ft. | JCB | ⅓ | 115V - 1 phase<br>230V - 1 phase | 12V | Vemco #320-023 | Yes | Optional |
| Up to 300 Sq. Ft. | JH | ½ | 230V - 3 phase<br>440V - 3 phase | 115V | G-E #320-039 | Yes | Optional |
| Over 300 Sq. Ft. | JH | ¾ | 550V - 3 phase | 115V | G-E #320-039 | Yes | Optional |

## MOUNTING POSITIONS


POSITION FOUR
OPERATOR AT LEFT OF DOOR ABOVE SHAFT-MOTOR UP (RIGHT HAND OPERATOR)
POSITION SIX AS REQ'D
OPERATOR ON CEILING ABOVE OR BELOW TRACK RIGHT OR LEFT OF DOOR SPECIFY RIGHT OR LEFT HAND OPERATOR
POSITION THREE
OPERATOR OVER DOOR-MOTOR UP RIGHT OR LEFT HAND OPERATOR AS REQ'D.
POSITION TWO
OPERATOR AT RIGHT OF DOOR ABOVE SHAFT-MOTOR UP (LEFT HAND OPERATOR)
POSITION FIVE
OPERATOR AT LEFT OF DOOR BELOW SHAFT-MOTOR DOWN (LEFT HAND OPERATOR)
NOTES IN REFERENCE TO POSITION SIX
MOUNTED TO CEILING OR TRACK-INVERTED POSITION
AT LEFT OF DOOR-SPECIFY R.H.OPERATOR
AT RIGHT OF DOOR-SPECIFY L.H.OPERATOR
MOUNTED TO TRACK-UPRIGHT POSITION
AT LEFT OF DOOR-SPECIFY L.H.OPERATOR
AT RIGHT OF DOOR-SPECIFY R.H.OPERATOR
POSITION ONE
OPERATOR AT RIGHT OF DOOR BELOW SHAFT-MOTOR DOWN (RIGHT HAND OPERATOR)

## WHEN YOU ORDER

**Please specify:**

1. Model symbol.
2. Current including voltage, phase and cycle.
3. Door width.
4. Door height.
5. Available Headroom.
6. For Trolley Type—Available depth. See drawing.
7. For Jackshaft Type—Diameter of driven shaft and number of turns required to open door.
8. Extra control stations if required.
9. For Jackshaft mounting positions—see drawing.

**NOTE** See Page 32 for Guarantee and Architect's Specifications.

# CONTROL STATIONS ELECTRIC OPERATORS

## THREE BUTTON CONTROL STATIONS

Operators using this type of control can be stopped at any travel point and can then be operated in either direction. Three Button Stations are marked "OPEN-CLOSE-STOP." Buttons normally are MOMENTARY CONTACT type but can be made CONSTANT CONTACT for "open" or "close" or both. Three Button Stations CANNOT be used on Single Button Operators.

Standard Station supplied with all three phase operators where control circuit is 115 volts. Wall mounting dimensions: 2¾" × 7½" × 2¾".

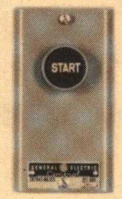
Low Voltage Station supplied with all single phase three-button operators where control circuit is 12 volts. For wall or flush mounting. Standard "handy box" enclosure.

Weatherproof, heavy duty station for outside or inside wall mounting. Available on request. Dimensions: 2¾" × 10" × 3½".

## SINGLE BUTTON CONTROL STATIONS

Operators using single button stations can be stopped but NOT REVERSED, until door has completed travel to fully open or closed position. Buttons are always MOMENTARY CONTACT. Three Button Stations CANNOT be used.

Low Voltage Station supplied with Electric Operators Models SC and MS. For wall or flush mounting. Standard "handy box" enclosure.



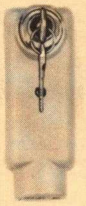
Standard Duty Station available on special request. Dimensions: 2¾" × 4½" × 2½".

Weatherproof, Heavy Duty Station for outdoor use. Wall mounting dimensions: 2¾" × 5" × 3½".

## KEY TYPE CONTROL STATIONS

Weatherproof for outdoor wall or post mounting. Key mechanically locks STOP button so that all buttons and stations are electrically inoperative. Dimensions: 2¾" × 10" × 3½".

Weatherproof for outdoor wall or post mounting. Key mechanically locks OPEN button only so that other stations can be used. Dimensions: 2¾" × 10" × 3½".



Weatherproof key switch. Single button momentary contact for outdoor post mounting. Interchangeable with any single button. Dimensions: 1¾" × 4½" × 2½".

Key switch for jamb or flush panel mounting. Single momentary contact. Dimension: ¾" diameter hole.

## GUARANTEE

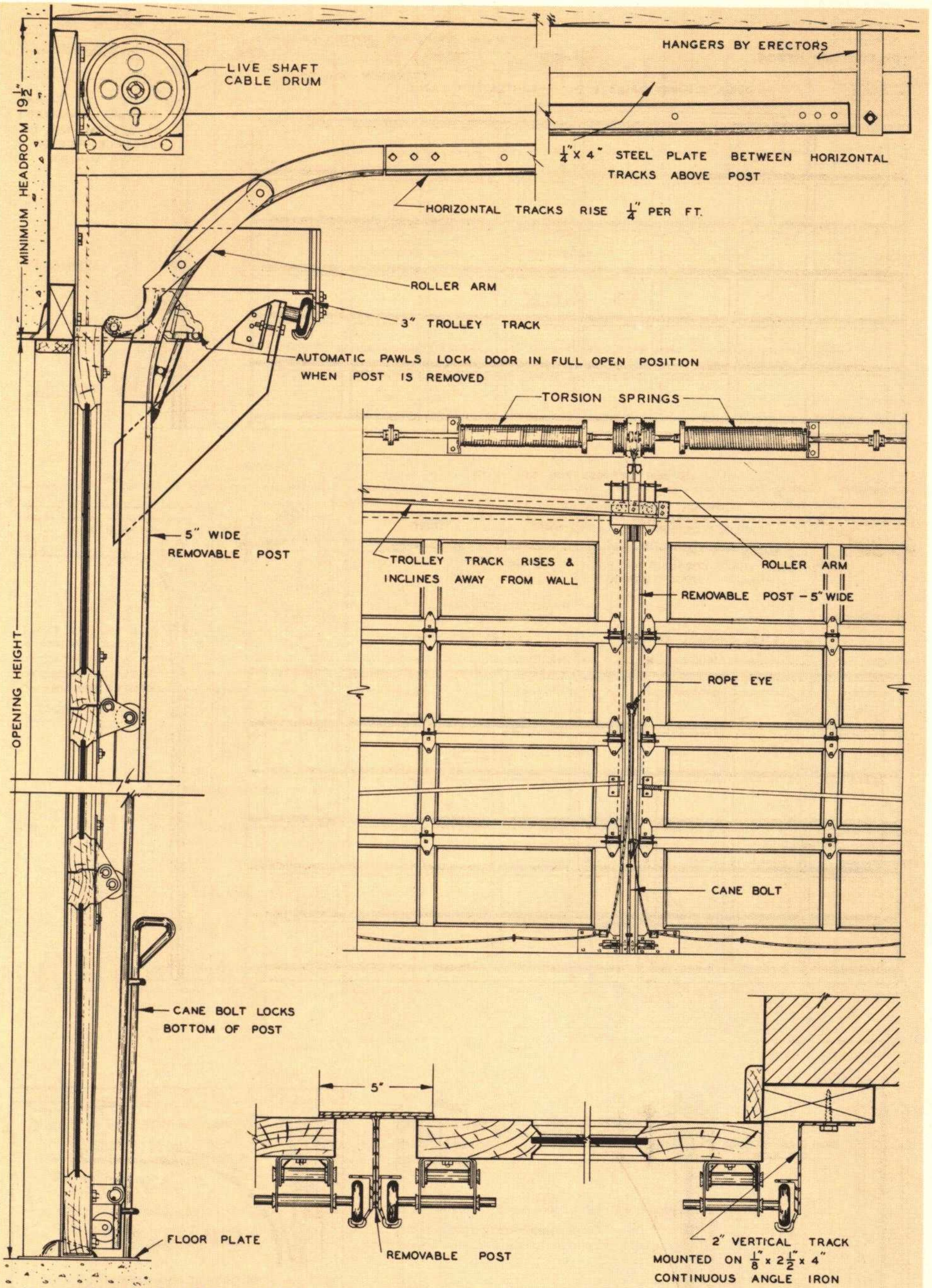
Rowe Manufacturing Co. guarantees each Ro-Way Electric Operator to be free from defects in material and workmanship for a period of one year from date of installation, providing defects are not caused by abuse or neglect. We reserve the right to recall to our factory for inspection, alleged imperfect materials.

## ARCHITECTS SPECIFICATIONS

Operators shall be Ro-Way Model______________with Roller Chain Drive and V-Belt, Sprocket and Chain; equipped with Microtype Rotary Limit Switches and Safety Friction Clutch as manufactured by Rowe Manufacturing Co., Galesburg, Illinois.

# REMOVABLE POST MODEL NO. 20

# Rō-WAY OVERHEAD DOORS


HANGERS BY ERECTORS
LIVE SHAFT CABLE DRUM
MINIMUM HEADROOM 19½"
¼" x 4" STEEL PLATE BETWEEN HORIZONTAL TRACKS ABOVE POST
HORIZONTAL TRACKS RISE ¼" PER FT.
ROLLER ARM
3" TROLLEY TRACK
AUTOMATIC PAWLS LOCK DOOR IN FULL OPEN POSITION WHEN POST IS REMOVED
TORSION SPRINGS
5" WIDE REMOVABLE POST
TROLLEY TRACK RISES & INCLINES AWAY FROM WALL
ROLLER ARM
REMOVABLE POST – 5" WIDE
ROPE EYE
OPENING HEIGHT
CANE BOLT
CANE BOLT LOCKS BOTTOM OF POST
5"
FLOOR PLATE
REMOVABLE POST
2" VERTICAL TRACK MOUNTED ON ⅛" x 2½" x 4" CONTINUOUS ANGLE IRON

TYPICAL SECTION THRU OPENING

TYPICAL INTERIOR ELEVATION AT POST

DETAIL PLAN OF POST AND JAMB

## DETAILED DESCRIPTION

**Uses:** For Model 811 and 851 torsion spring doors that require the removing of the Center Post to provide extra wide openings.

**Headroom:** 19½" clear space required.

**Sideroom:** 5" on one side of opening. 12" on opposite side for post to move clear of opening.

**Post Width:** Total width 5".

**Opening Sizes:** Not limited since several doors and removable posts can be used in one opening. Removable Posts can be placed in center of opening or off center as required making doors of equal or unequal widths.

**Trolley Track:** May be placed so post slides either to right or left side of door opening.

**Trolley Carriage:** Two ball bearing track rollers support the weight of the Removable Post when being moved.

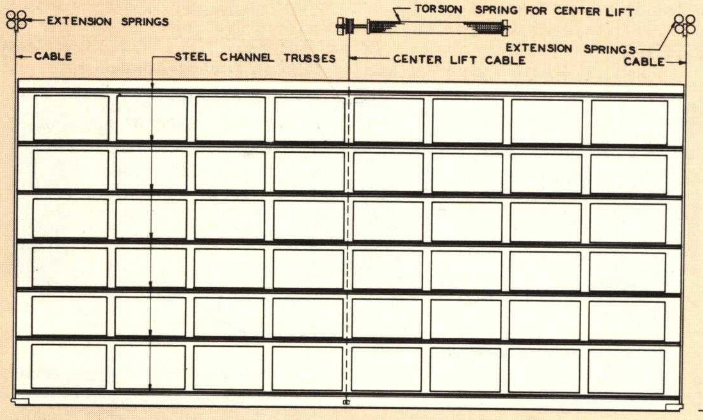
**Locking Pawls:** Doors automatically locked in open position when post is removed.

**Post in Position:** Held in firm alignment at top by two ½" steel pins—at bottom by ⅝" cane bolt.

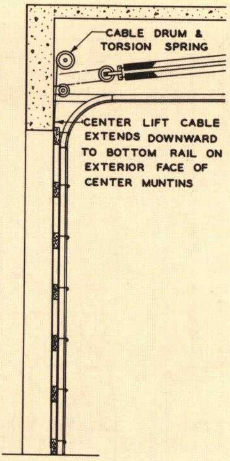
**Pass Door:** May be used on any one or all of the doors as required.

# CENTER SPRING LIFTS DOORS OVER 22′ 8″ WIDE

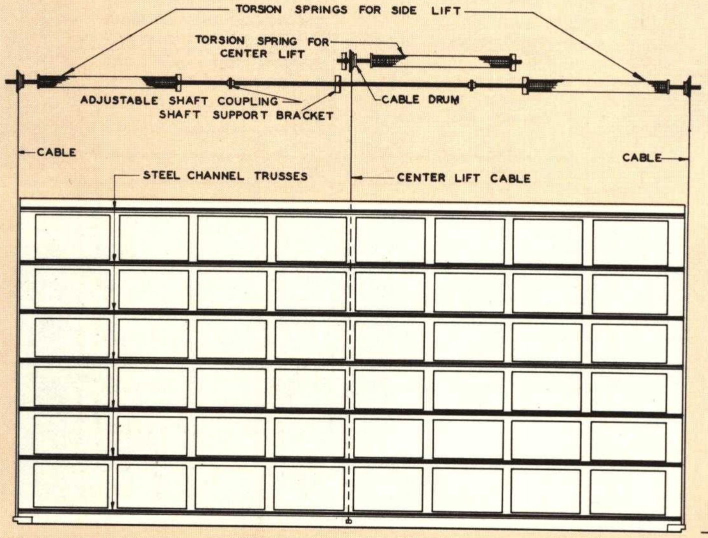
## INTERIOR ELEVATION EXTENSION SPRING DOOR



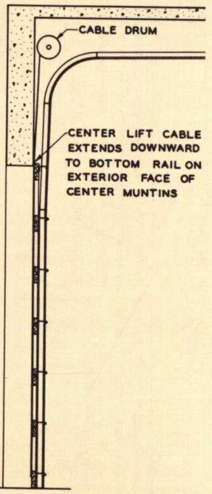
## SECTIONAL VIEW— DOOR AND EXTENSION SPRINGS


CABLE DRUM & TORSION SPRING
CENTER LIFT CABLE EXTENDS DOWNWARD TO BOTTOM RAIL ON EXTERIOR FACE OF CENTER MUNTINS

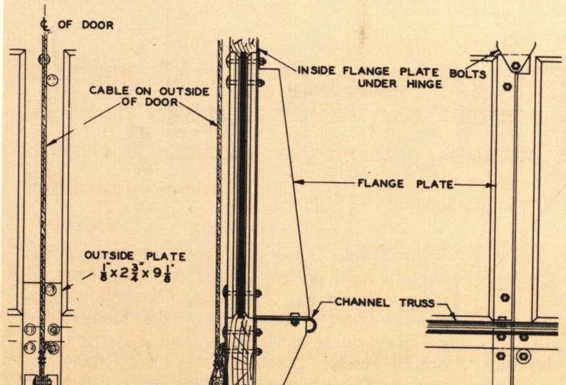
## INTERIOR ELEVATION TORSION SPRING DOOR


TORSION SPRINGS FOR SIDE LIFT
TORSION SPRING FOR CENTER LIFT
ADJUSTABLE SHAFT COUPLING
SHAFT SUPPORT BRACKET
CABLE DRUM
CABLE
CABLE
STEEL CHANNEL TRUSSES
CENTER LIFT CABLE

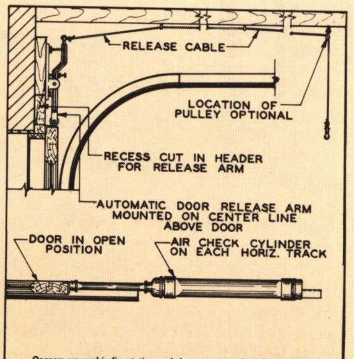
## SECTIONAL VIEW— DOOR AND TORSION SPRING


CABLE DRUM
CENTER LIFT CABLE EXTENDS DOWNWARD TO BOTTOM RAIL ON EXTERIOR FACE OF CENTER MUNTINS

## THREE VIEWS OF CABLE ATTACHMENT


℄ OF DOOR
CABLE ON OUTSIDE OF DOOR
OUTSIDE PLATE $\frac{1}{8}'' \times 2\frac{3}{4}'' \times 9\frac{1}{8}''$
INSIDE FLANGE PLATE BOLTS UNDER HINGE
FLANGE PLATE
CHANNEL TRUSS
OUTSIDE VIEW
SECTION THRU FLANGE AND TRUSS
INSIDE VIEW

## AUTOMATIC DOOR OPENER

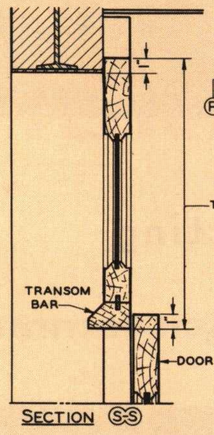

RELEASE CABLE
LOCATION OF PULLEY OPTIONAL
RECESS CUT IN HEADER FOR RELEASE ARM
AUTOMATIC DOOR RELEASE ARM MOUNTED ON CENTER LINE ABOVE DOOR
DOOR IN OPEN POSITION
AIR CHECK CYLINDER ON EACH HORIZ. TRACK

Openers are used in fire station, ambulance garage and similar buildings where quick opening of doors is necessary.

## TRANSOMS

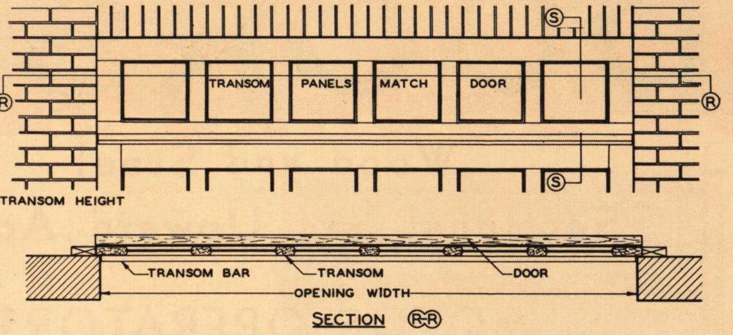
## PASS DOORS

# Rō-WAY OVERHEAD DOORS



**EXTERIOR ELEVATION OF TRANSOM**

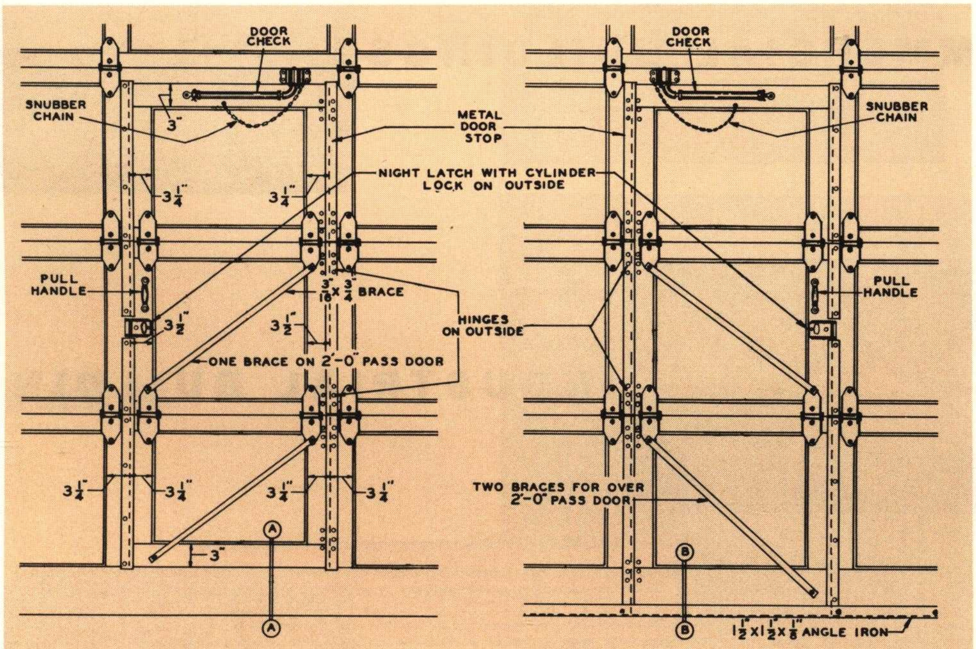
**PLAN VIEW**



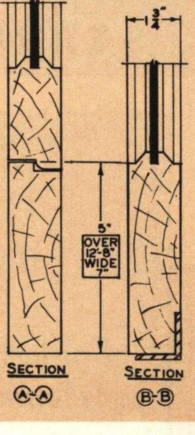
**USES:** To provide increased headroom—to improve architectural effect—to reduce opening height.
**SIZES:** Full width of door opening between jambs and any height below header. Panels or glass openings as preferred. Top rail of door seals against transom bar when door is closed.

**INTERIOR ELEVATION NO. 40 PASS DOOR WOOD BOTTOM RAIL**

**INTERIOR ELEVATION NO. 42 PASS DOOR STEEL BOTTOM RAIL**


DOOR CHECK
SNUBBER CHAIN
3"
METAL DOOR STOP
NIGHT LATCH WITH CYLINDER LOCK ON OUTSIDE
3 1/4"
PULL HANDLE
3/16" x 3/4" BRACE
HINGES ON OUTSIDE
3 1/2"
ONE BRACE ON 2'-0" PASS DOOR
TWO BRACES FOR OVER 2'-0" PASS DOOR
A
B
1 1/2" x 1 1/2" x 1/8" ANGLE IRON

**SECTIONAL VIEWS OF BOTTOM RAILS**



**NO. 40 PASS DOOR WOOD BOTTOM RAIL NOT OVER 18′ WIDE**

**USES:** For 1¾" thick commercial type doors. Permits pedestrians to pass through garage door without opening main door. Not recommended for doors over 18′ in width.

**PASS DOOR SIZES:** Limited to two panels in width and three sections in height. Panel openings may be either glass or Masonite Dorlux.

**WOOD BOTTOM RAIL:** Wood rails 5" wide. Door width over 12′ 8" requires a 7" wide bottom rail.

**HINGES:** Six vertical 2½" butt hinges are used on pass door independent of section hinges.

**BRACING:** One diagonal strap steel brace used on pass doors up to 24" wide. Two braces used on widths 24" and wider.

**DOOR CHECK:** Made with air cylinder 1¼" diameter x 10" long with adjustable air outlet valve. Check may be regulated so that pass door closes without slamming.

**LOCK:** Rim type night latch with tapered bolt operated from outside by lock cylinder keyed with door, is regularly furnished — two keys with each lock. Lock rod for main door engages in one vertical track only.

**NO. 42 PASS DOOR STEEL BOTTOM RAIL NOT OVER 14′ WIDE**

**BOTTOM RAIL:** 1½" x 1½" x 1/8" angle iron used in place of wood bottom rail. When pass door is open this creates only an inch and one-half threshold.

**LOCK:** Lock rod for main door engages in one vertical track only.

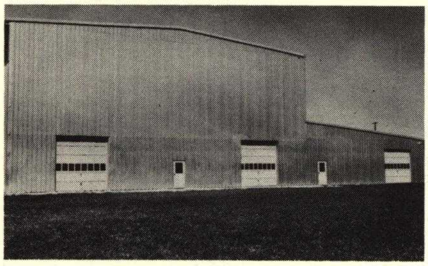
**OTHER CONSTRUCTION** for No. 42 Pass Door is the same as No. 40 described above.

# RŌ-WAY DOORS

Wood and Steel
Sectional and Upward Acting

## MOTOR OPERATORS

**COMMERCIAL BUILDINGS**



**INDUSTRIAL BUILDINGS**

**SERVICE STATIONS**

**RESIDENTIAL GARAGES**

(See Sweet's Light Construction File)

For Installing Distributors, see Yellow Pages of your Telephone Directory or write to factory.

**Rō-Way**
**OVERHEAD**
**DOORS**

**ROWE MANUFACTURING COMPANY**
**GALESBURG, ILLINOIS - U.S.A. - SINCE 1908**

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